Molokai Airport Aircraft Rescue and Fire Fighting Station Improvements

Project No. AM 2031-14

Hoolehua-Palaau, Molokai, Hawaii
TMK: 5-2-004:008; 082; and 083

DRAFT ENVIRONMENTAL ASSESSMENT

Prepared for:

State of Hawaii
Department of Transportation Airports Division
Honolulu, Hawaii 96819

Prepared by:

Wilson Okamoto Corporation
Honolulu, Hawaii 96826

Under Contract to:

Architects Pacific Inc.
Honolulu, Hawaii 96816

April 2009

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Prepared for:

State of Hawaii
Department of Transportation
Airports Division
700 Rodgers Boulevard, Suite 700
Honolulu, Hawaii 96819

Prepared by:

Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826
WOA: 7526-01

Under Contract to:

Architects Pacific Inc.
938-C Kapahulu Avenue
Honolulu, Hawaii 96816

April 2009

SUMMARY

Proposing Agency:	State of Hawaii Department of Transportation, Airports Division Honolulu International Airport, 400 Rodgers Blvd., Suite 700 Honolulu, Hawaii 96819-1880
Accepting Agency:	State of Hawaii Department of Transportation, Airports Division Honolulu International Airport, 400 Rodgers Blvd., Suite 700 Honolulu, Hawaii 96819-1880
EA Preparer:	Wilson Okamoto Corporation 1907 South Beretania Street, Suite 400 Honolulu, Hawaii 96826 Contact: John L. Sakaguchi, AICP, Senior Planner Tel: 808.946.2277; Fax: 808.946.2253
Project Location:	Hoolehua-Palaau, Molokai, Hawaii
Recorded Fee Owner:	State of Hawaii, Department of Transportation
Tax Map Key:	5-2-004: 008; 082; and 083
Area:	50,600 square feet (1.16 acres) approximately
State Land Use Classification:	Agricultural
County Zoning:	Interim
Proposed Action:	Construct a replacement Aircraft Rescue and Fire Fighting (ARFF) station to replace the existing substandard ARFF facility. The replacement ARFF station will include: spaces for two fire fighting trucks and one trailer; chemical and equipment storage rooms; watch room; office; kitchen/training room; three dormitory rooms; fitness room; lockers, showers, and toilets; emergency generator; a 500-gallon aqueous film-forming foam (AFFF) chemical storage tank, a 2,000-gallon above-ground diesel storage tank, improvements for on-site wastewater treatment and disposal, vehicle parking area, security fencing and a 365-foot long by 40-foot wide access driveway to Taxiway A.

Impacts:

No significant impacts are anticipated from the construction and operation of the replacement Aircraft Rescue and Fire Fighting station at the Molokai Airport project site.

Parties Consulted During Pre-Assessment Consultation:

Federal
Department of the Army
US Fish and Wildlife Service

State of Hawaii
State of Hawaii Department of Hawaiian Home Lands
State of Hawaii Department of Health
State of Hawaii Department of Land and Natural Resources
State of Hawaii Department of Land and Natural Resources/ Historic Preservation Division
State of Hawaii Office of Hawaiian Affairs

County of Maui
County of Maui Department of Environmental Management
County of Maui Department of Fire and Public Safety
County of Maui Planning Department
County of Maui Police Department
County of Maui Department of Public Works
County of Maui Department of Transportation
County of Maui Molokai Planning Commission
Maui Electrical Company

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PREFACE

Chapter 343, Hawaii Revised Statues (HRS), as amended, Environmental Impact Statements, requires that a government agency or a private developer proposing to undertake a project consider the potential environmental impacts of the proposed project by preparing an assessment. Use of public funds for a project is among the criteria set forth in Chapter 343, HRS which requires preparation of an environmental assessment.

The Molokai Airport Aircraft Rescue and Fire Fighting (ARFF) Station Improvements will use funds provided by the US Department of Transportation Federal Aviation Administration (FAA) for design and funds provided by the State of Hawaii for its construction. As such, the replacement ARFF is required to be in compliance with the State's Grant Assurance to have an ARFF station that complies with standards set forth in FAA Advisory Circular (AC) 150/5210-15A, September 10, 2008. The State of Hawaii Department of Transportation (DOT) will fund the operation and maintenance of the ARFF.

This Environmental Assessment (EA) has been prepared to meet the requirements of Chapter 343, HRS, as amended, and Hawaii Administrative Rules Title 11, State of Hawaii Department of Health, Chapter 200, Environmental Impact Statement Rules. A Finding of No Significant Impact (FONSI) is anticipated for the project as discussed in Chapter 5.

The FAA will issue a Categorical Exclusion (CatEx) to meet the requirements of FAA Order 5050.4B "National Environmental Policy Act (NEPA) Implementing Instructions for Airport Actions," FAA Order 1050.1E, "Environmental Impacts: Policies and Procedures," which incorporates the Council on Environmental Quality (CEQ) regulations for implementing the National Environmental Policy Act (NEPA), federal statutes and laws designed to protect the Nation's resources.

In 1981, the DOT issued an Environmental Assessment the Molokai Airport Improvements project which addressed various improvements at Molokai Airport. Subsequently, in May 1999, the DOT published the Molokai Airport Master Plan which determined and documented the type and extent of aviation facilities needed through 2020. The Master Plan addressed the entire Airport and was based on development concept plans prepared in 1990 and 1991.

1. INTRODUCTION

1.1 Project Background

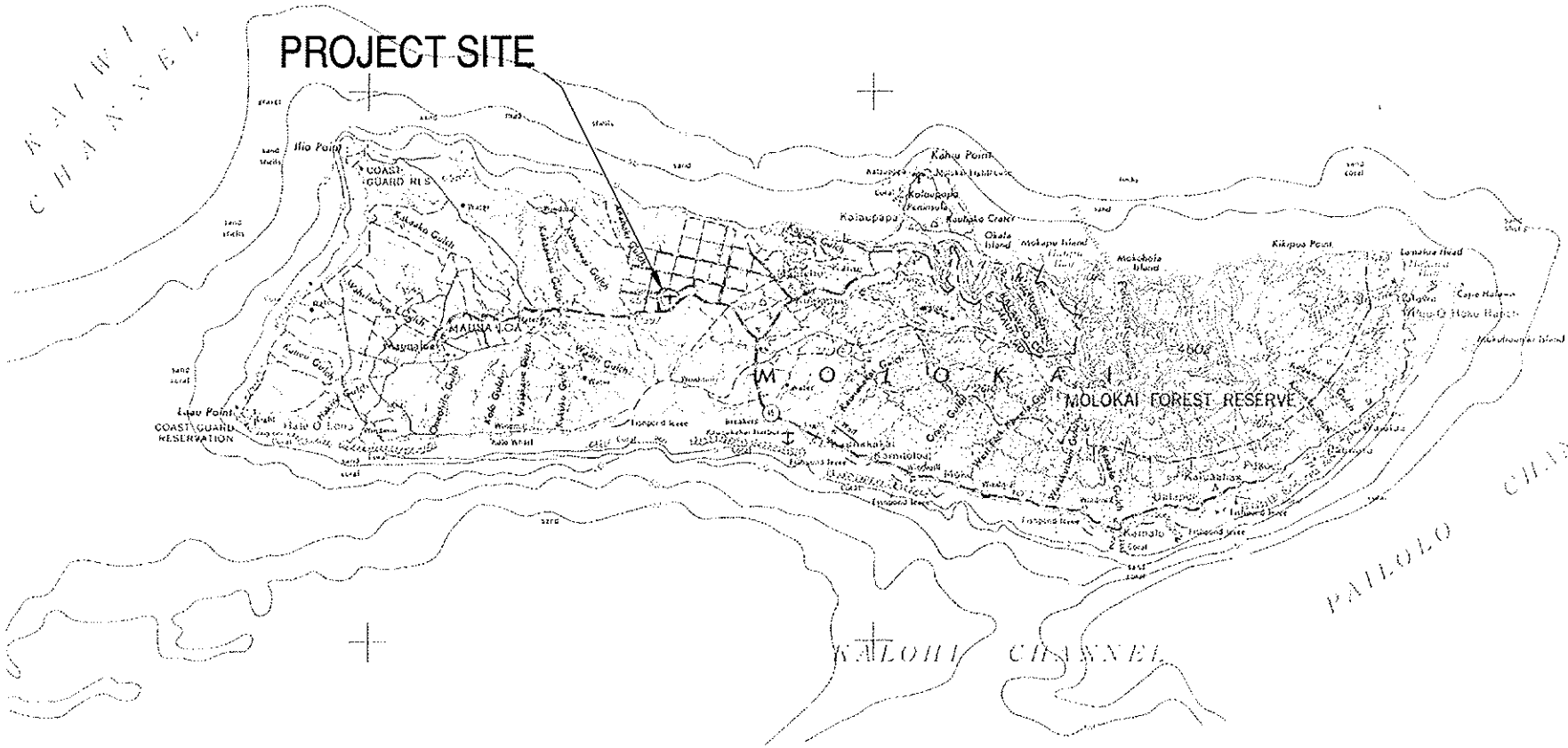
The State of Hawaii Department of Transportation (DOT) Airports Division operates and maintains 15 airports in Hawaii, including Molokai Airport, which is part of the Maui District. Molokai Airport is owned and operated by the DOT and classified as a "Commercial Service - Primary Airport" ~ the National Plan of Integrated Airport Systems (NPIAS) serving short-haul air carrier routes of less than 500 miles. Facilities at the Airport accommodates mostly air carrier and commuter/air taxi passenger and cargo operations and some general aviation and military operations. Molokai Airport operates under Federal Air Regulations (FAR) Part 139 Certificate which prescribes rules governing scheduled passenger-carrying operations of an air carrier operating aircraft designed for more than 9 passenger seats.

Molokai Airport is further classified as an Index A airport, an index rating based on the type of aircraft rescue and fire fighting equipment and quantity of fire extinguishing agent that the Airport must provide in accordance with FAR Part 139.315. In addition, as an operator of a Part 139 airport, Molokai Airport is required to provide aircraft rescue and fire fighting services during air carrier operations that requires a Part 139 Certificate. (Air carrier operations means the takeoff or landing of an air carrier aircraft and includes the period of time 15 minutes before until 15 minutes after the takeoff or landing.

Molokai Airport is located on the Hoolehua plateau area of Molokai's central plateau with the towns of Kaunakakai 6 miles to the southeast, Kualapuu 3½ miles to the east and Maunaloa 8 miles to the southwest. The Airport boundary encompasses approximately 206.811 acres of land (Tax Map Key: 5-2-004: 008; 082; and 083) and the Airport reference point elevation is 454 feet mean sea level (msl). Figure 1-1 shows the Airport location map. Figure 1.2 shows the Airport site map. Figure 1.3 shows the Airport boundary map.

The State Land Use Commission designates the Molokai Airport in the Agricultural District. The Molokai Airport, including the project site, is designated Airport in the County of Maui Molokai Community Plan dated 2001. The County of Maui zoning designation is Interim.

Molokai Airport is not located within the County of Maui Special Management Area.



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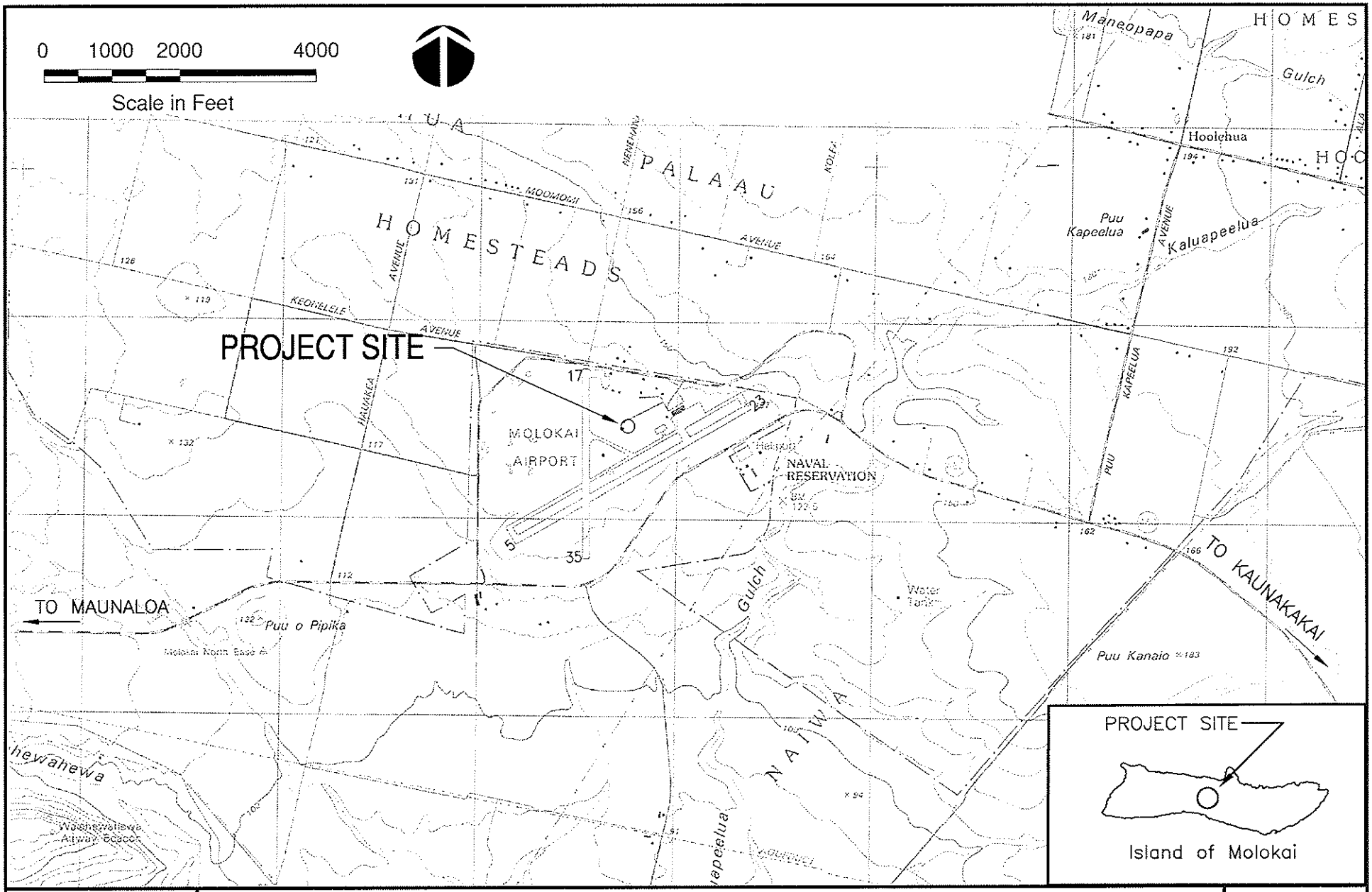
ENGINEERS • PLANNERS

MOLOKAI AIRPORT AIRCRAFT RESCUE AND FIREFIGHTING STATION IMPROVEMENTS

AIRPORT LOCATION MAP

FIGURE
1.1



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ENGINEERS • PLANNERS

MOLOKAI AIRPORT AIRCRAFT RESCUE AND FIRE FIGHTING STATION IMPROVEMENTS

AIRPORT SITE MAP

FIGURE 1.2

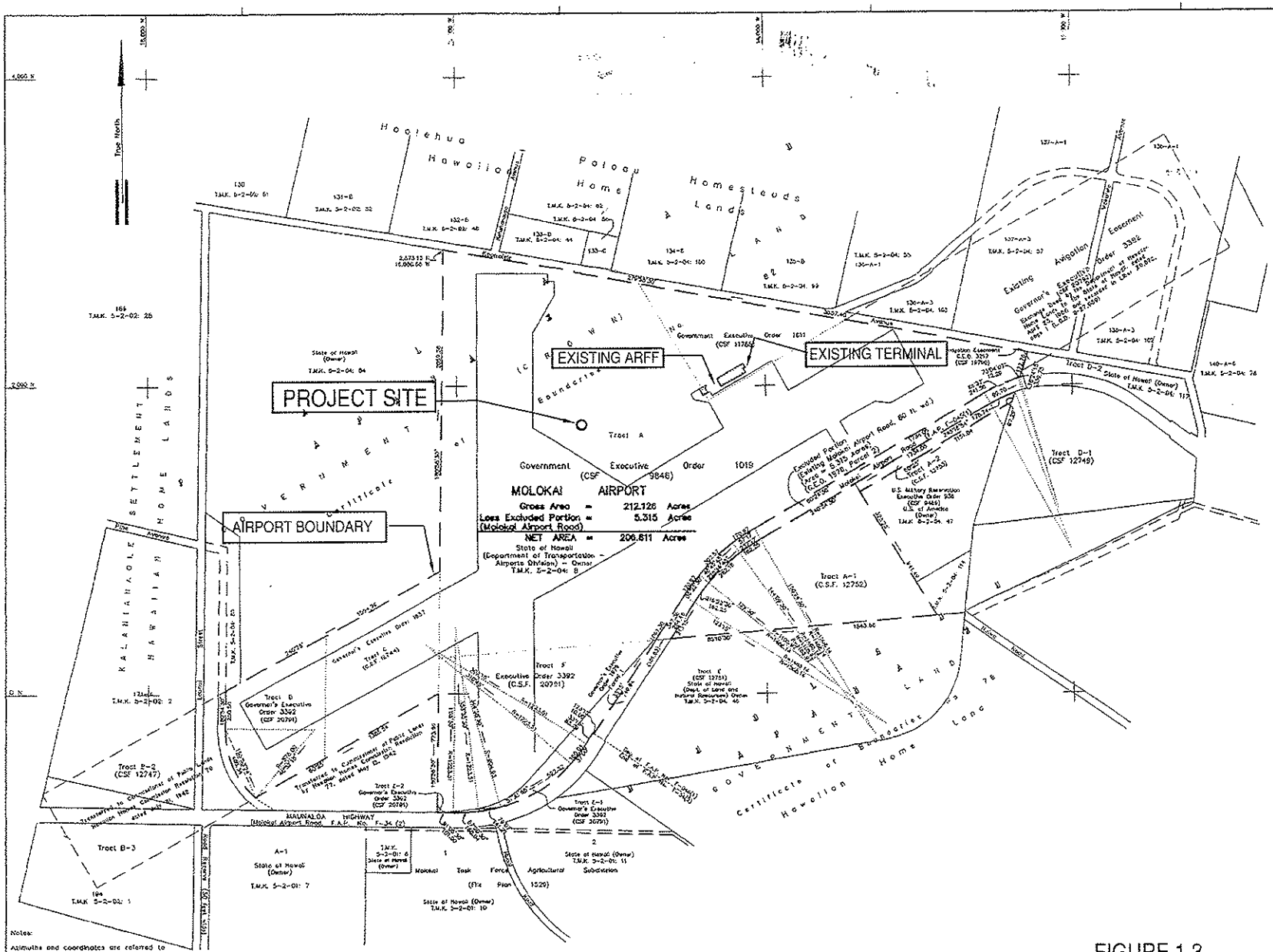


FIGURE 1.3

Airports Division

R. M. TOWILL CORPORATION

This work was prepared by me or under my direct supervision

Ryan M. Suzuki
Licensed Professional Land Surveyor
Certificate Number 10026

420 Ala Moana Blvd, Suite 411
Honolulu, Hawaii 96817

DSGN.	DRWN.	CHKD.	APPD.

KEY PLAN / NOTES:

NO.	DATE	REVISIONS

PROJECT TITLE :

MOLOKAI AIRPORT
AT PALAAU AND HOOLEHUA, ISLAND OF MOLOKAI, HAWAII

SCALE

PROJECT NO. :

AS1011-12

SHEET TITLE :

Boundary Map (Exhibit A)

DATE:	SHEET
June 2001	1
DWG. NO.:	OF 1 SHEET

1.2 Purpose and Need

The purpose of the project is construct a replacement ARFF Station which will meet the current building and design requirements set forth by the US Department of Transportation Federal Aviation Administration (FAA) in Advisory Circular (AC) 150/5210-15A, Airport Rescue and Fire Fighting Station Building Design, dated September 10, 2008, which governs ARFF building requirements.

The primary responsibility and objective of the ARFF station is to provide a timely response, protect life and property, and minimize the effects of an aircraft accident, incident, or catastrophic event occurring primarily on airport property. Typically, the key to successful execution of this role can be achieved by optimizing the location of the airport fire station(s) and designing the station to enhance the effectiveness and efficiency of emergency services personnel.

The ARFF location is a critical element in reducing emergency response times to an aircraft related incident. Response times can be further reduced by ensuring that the facility's layout and floor plan provide a smooth and unimpeded flow of personnel traffic to reach emergency response vehicles in the shortest period of time possible.

As previously discussed, Molokai Airport operates under Federal Air Regulations (FAR) Part 139 Certificate which defines air carrier operations as the takeoff or landing of an air carrier and includes the period of time from 15 minutes before and 15 minutes after the takeoff or landing.

Construction of the replacement ARFF station will not result in changes to the level of aircraft operations to Molokai Airport. Similarly, construction of the replacement ARFF station will not affect the need for other facilities or improvements on the Airport, including the need for expansion of the airfield area or use of other areas of Molokai for an airport. Once the replacement ARFF Station has been constructed, the existing substandard building will be converted to another aviation-related use and the adjacent temporary facility will be removed.

The replacement ARFF station will be a public facility owned by the DOT to be used for public purposes.

1.3 Project Site and Conditions

1.3.1 Project Site

The replacement ARFF Station is sited north and west of the intersection of Runway 5-23 and Runway 17-35, and east of the existing air traffic control (ATC) tower. This location is about 650 feet west of the existing ARFF station and about 800 feet west of the existing passenger terminal building. The project site is based on the Airport Layout Plan (ALP) which was approved as part of the Molokai Airport Master Plan issued in May 1999. Figure 1.4 shows site photographs. Figure 1.5 shows the terminal area and access plan from the 1999 Master Plan ALP.

The selected project site is about 550 feet closer than the existing station to Runway 5, the runway used for about 80 percent of aircraft operations at Molokai Airport. The site will allow direct access to Taxiway A, the taxiway parallel to Runway 5-23, and then to the runway end.

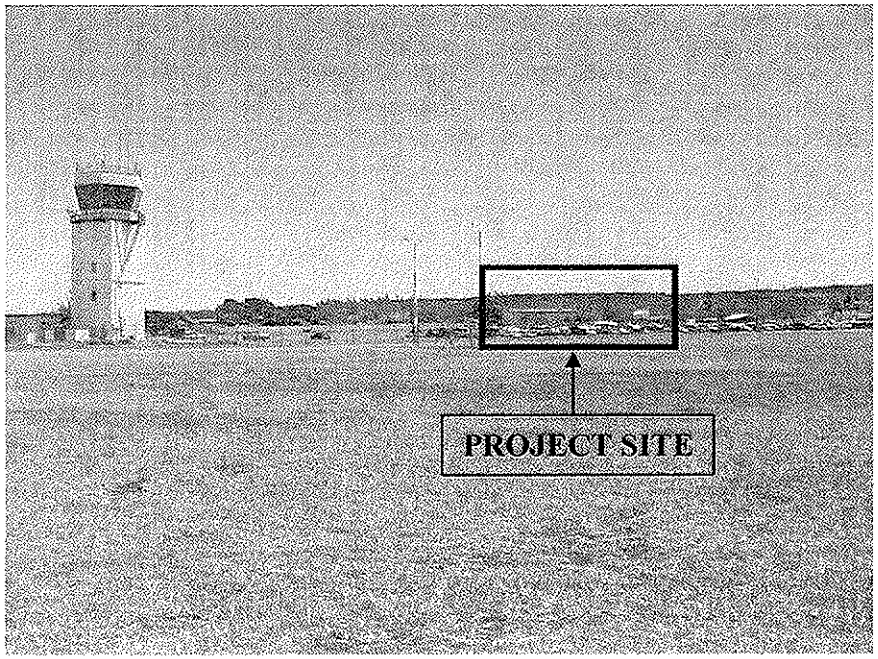
1.3.2 Existing Project Site Conditions

The project site for the ARFF station is located near the intersection of the Airport's two runways. As such, the project site was probably cleared and graded as part of the initial development of the Airport, which occurred starting 1927. The project site was not cleared and graded as part of the work for the replacement ARFF station.

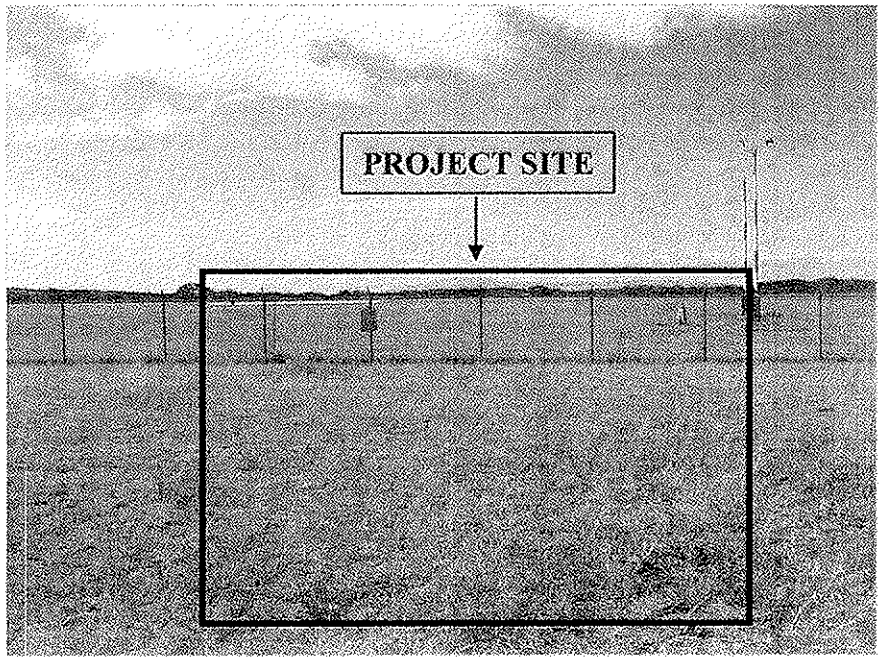
The approximately 50,600 square-foot (1.16 acres) project site is a previously cleared open grass-covered portion of the airfield primarily located within the secured air operations area. According to previous botanical surveys of the area, the project site is vegetated with exotic (non-native) grasses and herbs. No buildings or other structures are located on the project site.

1.4 Existing Airport Facilities

Historical information shows the existing Airport site has been used as an airport since December 1927. Studies undertaken in 1981 as part of the Molokai Airport Improvements project identified portions of the Airport still contain the remnants of bunkers consisting of horseshoe-shaped earthen revetments, earth cover Quonset huts

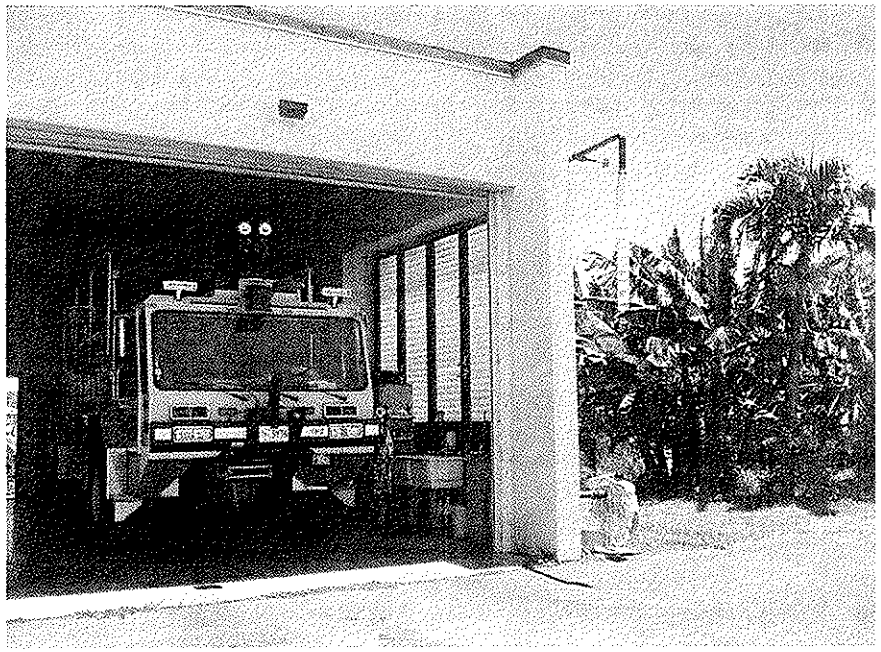


Project site looking north – air traffic control tower on left



Project site looking south

View toward Runway 5



Existing ARFF station

FIGURE 1.4 Project Site Photographs

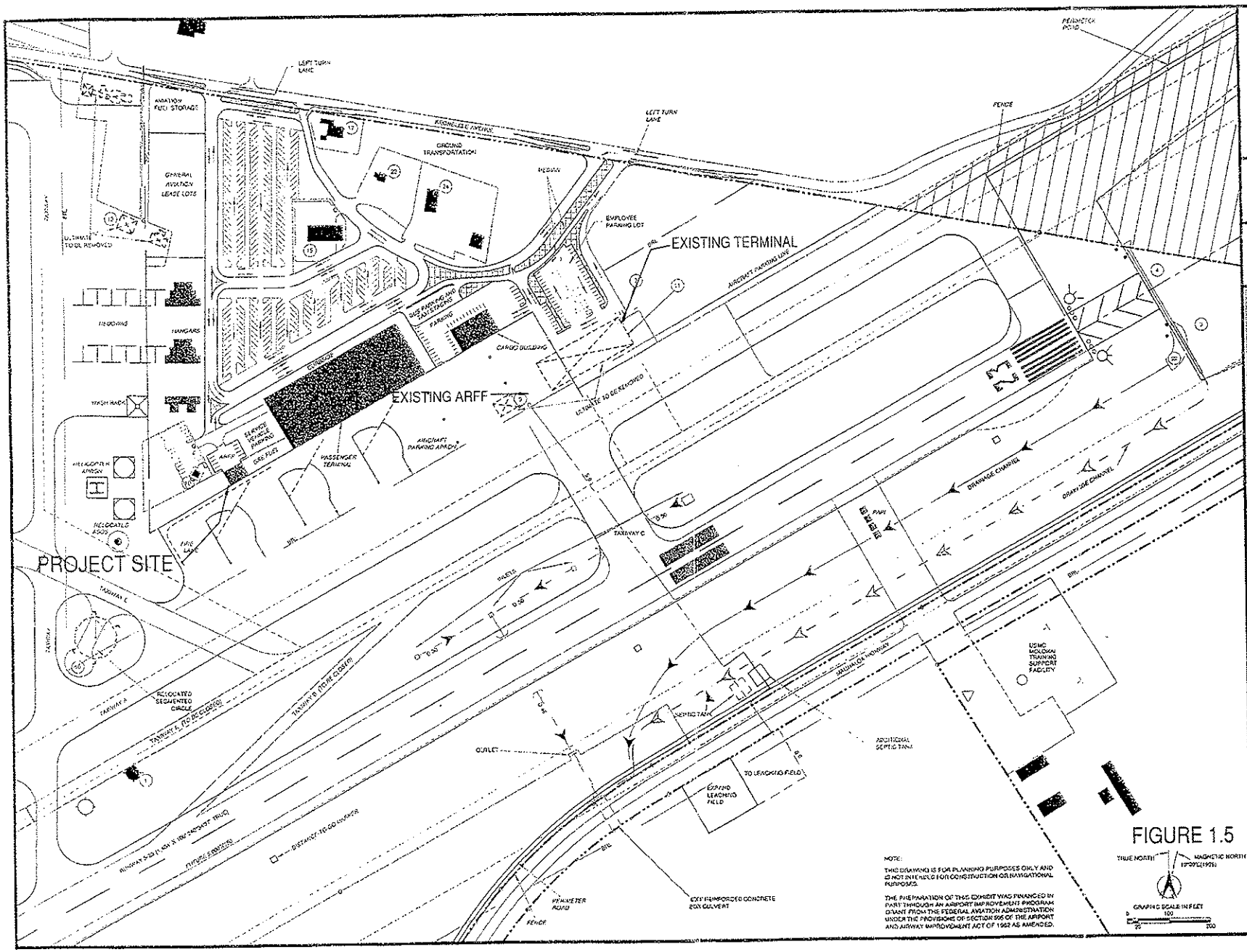


FIGURE 1.5

NOTE:
THIS DRAWING IS FOR PLANNING PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR NAVIGATIONAL PURPOSES.

THE PREPARATION OF THIS EXHIBIT WAS FINANCED IN PART THROUGH AN AIRPORT IMPROVEMENT PROGRAM GRANT FROM THE FEDERAL AVIATION ADMINISTRATION UNDER THE PROVISIONS OF SECTION 505 OF THE AIRPORT AND AIRWAY IMPROVEMENT ACT OF 1982 AS AMENDED.

Airports Division

MOLOKAI AIRPORT MASTER PLAN

ISLAND OF MOLOKAI

TERMINAL AREA AND ACCESS PLAN

LEGEND		
EXISTING	ULTIMATE	
		STRUCTURE
		AIRFIELD/APRON PAVEMENT
		AIRPORT PROPERTY LINE
BRL	BRL	BUILDING RESTRICTION LINE
		FENCING
●	⊙	AIRPORT REFERENCE POINT
		DRAINAGE SWALE
T	T	TEL
		THRESHOLD LIGHTS
W	W	WIND SOCK
P	P	POWER LINES
G	G	GATE
		DISTANCE TO/GO MARKER
		AVIGATION EASEMENT

EXISTING FACILITY LEGEND
1 AIRPORT REFERENCE POINT
5 APPROACH SURFACE 20:1
6 RUNWAY 23 PROTECTION ZONE (1,000'X1,000'X700')
7 PASSENGER TERMINAL
8 PASSENGER TERMINAL APRON
9 AIRCRAFT RESCUE AND FIREFIGHTING FACILITY
10 AIR TRAFFIC CONTROL TOWER
11 GLYCOL
12 CONCRETE TIEDOWN AREA
13 EXISTING HANGARS
14 EXISTING TIEDOWNS
16 DEPARTMENT OF TRANSPORTATION MASS WIND
15 LIGHTED WIND TEE AND SEGMENTED CIRCLE
17 FAA FACILITY
18 COMPASS ROSE
20 FUEL ISLAND AND UNDERGROUND TANK
21 OVERNIGHT PARKING
22 CONCRETE OPEN CHANNEL
23 BUDGET RENT A CAR
24 DOLLAR RENT A CAR
25 EMPLOYEE PARKING
26 PUBLIC PARKING

NO.	REVISIONS	DATE

FAA APPROVAL:
REFER TO FAA LETTER DATED

DIRECTOR, DEPARTMENT OF TRANSPORTATION, STATE OF HAWAII — DATE

ENGINEERING CONCEPTS, INC.
ARIES CONSULTANTS LTD.

DATE: 05-28-99

DWG. NO. SHEET 2 OF 3

with concrete floors, woodlined causeways, and extensive road systems constructed from 1942 to 1947.

In May 1999, the DOT published the *Molokai Airport Master Plan* which determined and documented the type and extent of aviation facilities needed through 2020. The Master Plan addressed the entire airport and was based on development concept plans prepared in 1990 and 1991. A Federal Air Regulations (FAR) Part 150 Airport Noise Compatibility Program, also prepared in 1999, recommended noise abatement and mitigation measures which would be needed to implement the Master Plan.

The major existing facilities at Molokai Airport include:

1. A 4,494-foot long by 100-foot wide runway oriented in a northeast-southwest direction (Runway 5-23);
2. A 3,118-foot long by 100-foot wide crosswind runway (Runway 17-35) oriented in a northwest-southeast direction, (Runway 17-35 intersects Runway 5-23 approximately 1,300 feet northeast of Runway 5);
3. A 50-foot wide taxiway parallel to Runway 5-23 (Taxiway A);
4. A 50-foot wide taxiway (Taxiway E) which connects Runway 17-23 to Taxiway A.
5. A small (200-foot by 100-foot) general aviation parking apron;
6. A commuter airline parking/tie-down ramp;
7. A 460-foot by 200-foot air carrier apron fronting the terminal building;
8. A 16,800-square foot passenger terminal building;
9. Passenger and employee parking areas;
10. Rental car facilities;
11. An aircraft rescue and fire fighting (ARFF) facility;
12. An air traffic control (ATC) tower,
13. DOT airport maintenance baseyard;
14. Three weather stations, one operated by the National Weather Service and the other two by the FAA; and,
15. Supporting infrastructure and utilities.

Figure 1.6 shows the existing airport facilities plan.

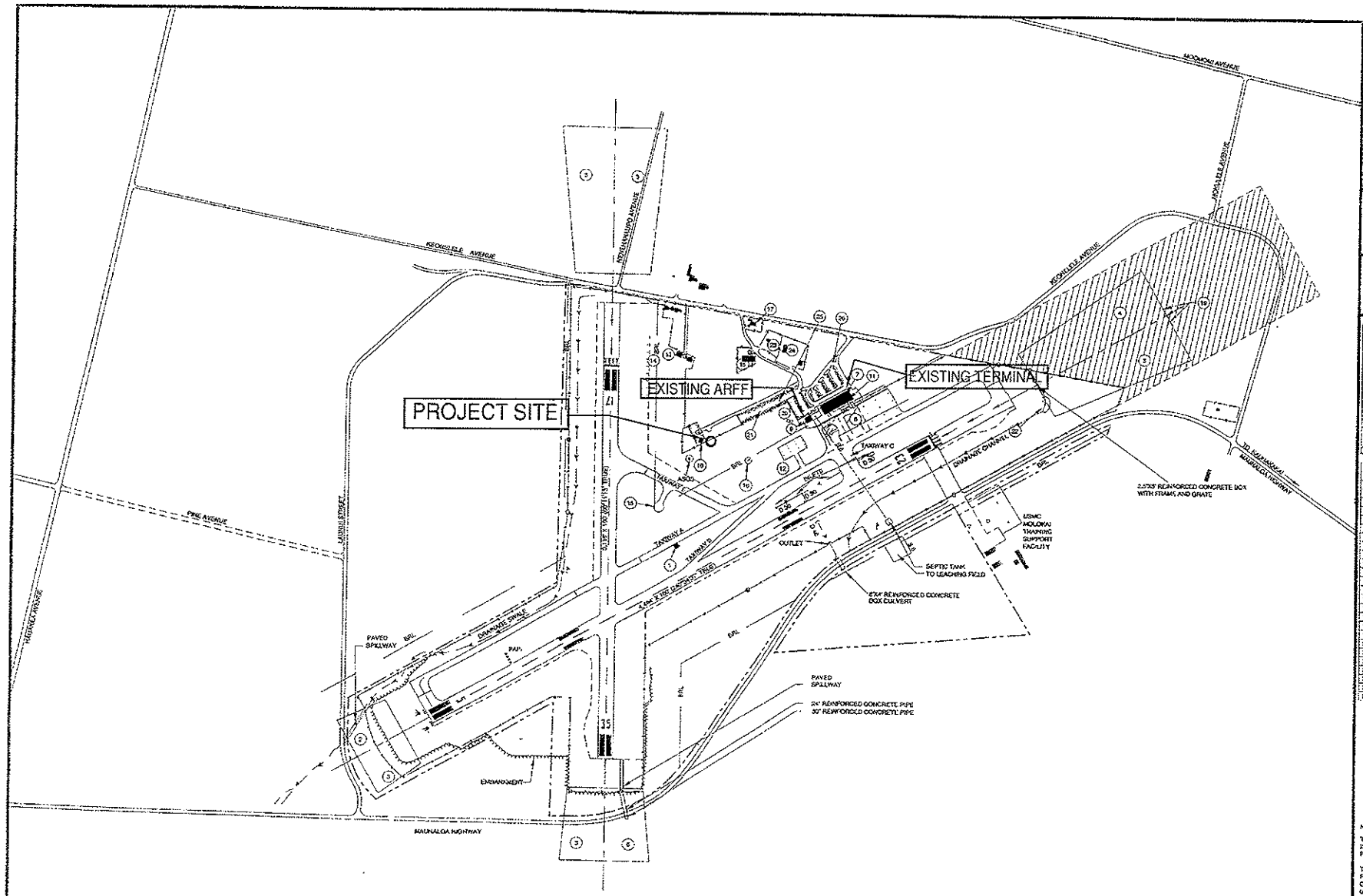


FIGURE 1.6

Airports Division

MOLOKAI AIRPORT MASTER PLAN

ISLAND OF MOLOKAI

EXISTING AIRPORT FACILITIES

LEGEND	
	STRUCTURE
	AIRFIELD/APRON PAVEMENT
	AIRPORT PROPERTY LINE
BRL	BUILDING RESTRICTION LINE
	FENCING
	AIRPORT REFERENCE POINT
	DRAINAGE CHANNEL
	RUNWAY LIGHTS
	REIL
	THRESHOLD LIGHTS
	WIND CONE
	ROTATEN LINES
C	GATE
	AVIGATION EASEMENT

EXISTING FACILITY LEGEND	
1	AIRPORT REFERENCE POINT
2	RUNWAY 5 PROTECTION ZONE (5/1250/4000/5000)
3	APPROACH SLOPE ACE 20:1
4	RUNWAY 23 PROTECTION ZONE (1,000'/1000'/1700')
5	RUNWAY 17 PROTECTION ZONE (1,000'/1000'/1700')
6	RUNWAY 35 PROTECTION ZONE (500'/1000'/2000')
7	PASSENGER TERMINAL
8	PASSENGER TERMINAL APRON
9	AIRCRAFT RESCUE AND FIREFIGHTING FACILITY
10	AIR TRAFFIC CONTROL TOWER
11	BEACON
12	TENENANT TIEDOWN AREA
13	EXISTING HANGARS
14	EXISTING TIEDOWNS
15	DEPARTMENT OF TRANSPORTATION BASEYARD
16	LIGHTED WIND TEE AND SEGMENTED CIRCLE
17	FAA FACILITY
18	COMPASS ROSE
19	OBSTRUCTION LIGHTS
20	FUEL ISLAND AND UNDERGROUND TANK
21	OVERNIGHT PARKING
22	CONCRETE OPEN CHANNEL
23	BUDGET RENT A CAR
24	DOLLAR RENT A CAR
25	EMPLOYEE PARKING
26	PUBLIC PARKING

TRUE NORTH

MAGNETIC NORTH 10°30'E(1992)

GRAPHIC SCALE IN FEET

0 200 400 600

NOTE:

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ARIES CONSULTANTS LTD.

DATE: 05-26-99

DWG. NO.: MKK-02EA

1.4.1 Runways

Runway 5-23 is 4,494 feet long by 100 feet wide and oriented in a northeast-southwest direction. Runway 5-23 is utilized by twin-engine turboprop air carrier, commuter and air taxi aircraft and twin and single engine general aviation aircraft.

Runway 17-35 is 3,118 feet long by 100 feet wide and oriented in a northwest-southeast direction. Runway 17-35, due to its relatively short length, is primarily used by general aviation aircraft with occasional operations by commuter aircraft during periods of excessive crosswinds.

1.4.2 Navigation Aids

Present safety/navigational aids consist of a non-precision instrument marking with aiming markings, REILS on Runway 5, medium intensity runway lights on Runway 5-23 and a segmented circle with lighted wind tee. Runway 17-35 has basic markings and is unlighted.

1.4.3 Passenger Terminal

The existing terminal facilities consist of a 16,800-square foot single-level building housing the passenger ticketing, baggage handling and air cargo areas, a small snack shop, security and airline offices, a common holdroom, rental car booths, one commuter airline booth, and airport administrative offices. One commuter airline constructed its own terminal building northeast of the main terminal building.

1.4.4 Aircraft Parking

The existing 110,000-square foot air carrier and commuter aircraft parking apron is located on the south side of the terminal building.

1.4.5 Cargo Facilities

The passenger and all cargo carriers use leased space in the passenger terminal building for their cargo operations. Others use the grassy area by the two hangars at the north end of the Airport.

1.4.6 General Aviation Facilities

The general aviation area, located north of the air traffic control tower, includes two hangars, and nine (9) tiedowns. There are also eight aircraft tiedown positions southwest of the air carrier/commuter aircraft parking apron.

1.4.7 Airport Access and Parking

The primary access to the Airport is via a two-lane paved road which connects to Keonelele Avenue north of the Airport. The Molokai Airport property boundary map shows Keonelele Avenue and Hauakea Avenue, another nearby road located to the west, are both outside the Molokai Airport property. As such, these roads should be considered County roads and maintained by the County of Maui. The DOT maintains roads within the boundaries of the Airport.

The airport parking areas consist of stalls fronting the passenger terminal building, employee stalls adjacent to the ARFF facility, stalls north of the ARFF reserved for car rentals, and stalls at the base of the air traffic control tower (ATC) tower. Overnight parking is limited to a grass, unmarked area adjacent to the ATC tower access road.

1.4.8 Airport Baseyard

Maintenance facilities for the Airport are located in the State DOT baseyard facility located north of the terminal building.

1.4.9 Air Traffic Control Tower

The Air Traffic Control (ATC) tower is located about 900 feet west of the existing passenger terminal building. Construction plans show the floor of the ATC tower at 44 feet above the surrounding ground level. The ATC tower opened 1982 and has been operated since 1994 by a private contractor. The ATC tower hours are 5:30am to 8:30pm (0530 to 2030), or to last scheduled flight plus 15 minutes.

1.4.10 Utilities

Potable water for domestic consumption and fire protection is provided from the Department of Hawaiian Home Lands (DHHL) system north of the Airport.

Wastewater from the Airport is collected and transported under Runway 5-23 and Maunaloa Highway (State Highway 460) and discharges into a leach field located south of the Airport.

The drainage system at the passenger terminal building consists of two catch basins located curbside of the roadway fronting the terminal and a field inlet northeast of the terminal. These drainage structures carry runoff through 24-inch pipes to dry wells located east and west of the terminal. Grated inlets located between Runway 5-23 and the Taxiway A drain the immediate area. The grated inlets are connected to 30-inch pipes that convey runoff through a 48-inch pipe and outlets adjacent to Maunaloa Highway. The area northeast of Runway 5-23 drains into and through a grated concrete channel, through a drainage swale parallel to Runway 5-23, and then outlets into undeveloped land adjacent to the Airport.

The Airport electrical power system is provided by Maui Electric Company (MECO) from an overhead line along Keonelele Avenue.

Telephone service is provided by the Hawaiian Telephone Company through overhead lines along Keonelele Avenue.

A 40-kilowatt (KW) diesel engine generator provides emergency power for runway, terminal and restroom lighting and selected terminal outlets for airline computers. An above-ground l00-gallon diesel fuel tank supplies fuel to the generator.

1.5 Aviation Activity

The DOT Airports Division maintains information for the Airport regarding number of passengers enplaned and deplaned, number of pounds of air cargo and mail enplaned and deplaned, and number of aircraft operations, defined as takeoffs and landings. Since 1990, aviation activity has shown great variability from year-to-year and over time. Most recently, the number of passengers increased from 219,224 in 2006 to 238,337 in

2007, an increase of 19,113 passengers, or a 9.2 percent gain. During this period, aircraft operations decreased from 39,685 in 2006 to 37,615 in 2007, a decrease of 2,070 operations, or a 5.2 percent decline. Table 1.1 shows aviation activity at Molokai Airport.

Table 1.1
Molokai Airport Aviation Activity, 1990 - 2007

Year	Passengers	Air Cargo	Air Mail	Aircraft Operations
1990	331,249	783	91	43,509
1991	316,576	954	100	47,898
1992	314,489	1,064	95	35,662
1993	280,044	531	99	39,057
1994	253,520	548	99	38,369
1995	243,131	559	82	45,517
1996	247,477	680	84	49,221
1997	252,237	973	66	44,667
1998	252,592	1,207	175	49,353
1999	269,752	1,408	239	49,184
2000	257,975	1,332	178	44,691
2001	215,638	1,322	84	43,806
2002	208,761	1,271	1	43,085
2003	197,343	1,432	58	40,994
2004	192,037	1,229	68	36,757
2005	196,847	1130	85	39,364
2006	219,224	981	276	39,685
2007	238,337	1,133	355	37,615

Source: DOT Airports

1.6 Existing Aircraft Rescue and Fire Fighting Facilities

The existing Aircraft Rescue and Fire Fighting (ARFF) facilities are located immediately west side of the passenger terminal building. The existing facilities consist of a 3,884-square foot ARFF building, originally built around 1970 as a maintenance and fire apparatus room, and a recently completed 1,100-square foot temporary housing facility located to the west of the existing ARFF station. The existing ARFF building contains space to park one ARFF truck, storage space for fire fighting equipment, and an open area with a table used by the crew for meetings and related activities.

The 1,100-square foot temporary facility includes four (4) dormitory rooms, a multi-purpose room for training and dining, kitchen, showers, lockers, toilet, and laundry area. The temporary structure will be removed upon completion of the replacement ARFF Station.

The Airport has an Index A rating for ARFF facilities, a rating based on the type of aircraft rescue and fire fighting equipment and quantity of fire extinguishing agent that the Airport must provide in accordance with FAR Part 139.315.

ARFF equipment currently available at the Airport includes two fire fighting trucks, one with 1,500 gallons of light water and 500 pounds of dry chemical and the other with 1,000 gallons of light water and 500 pounds of dry chemical.

The existing facility has a number of deficiencies noted by the FAA for both crew accommodations and equipment storage. Furthermore, the current building is not in compliance with FAA Advisory Circular 150/5210-15 which governs ARFF building requirements. The FAA District inspection report dated May 1, 2003 cites the Molokai Airport ARFF building as not being in compliance with requirements set forth by Title 14 CFR Part 139, the Airport Certification Manual and the Airport Operating Certificate.

One deficiency of the existing ARFF building is the inadequate size of the vehicle bay to house current fire fighting equipment in accordance with the standards in FAA Advisory Circular 150/5210-15. The current vehicle bays do not allow for adequate clearance around the parked ARFF vehicle. In addition, there is inadequate storage space for ARFF equipment, bunker gear, and fire fighting agents. The lack of adequate storage facilities requires that fire fighting equipment and gear be stored along the interior walls. The existing facility also lacks space to conduct daily administrative activities and functions. Interior lighting of the available spaces is also inadequate.

1.7 Project Description

1.7.1 Project Site Plan

The replacement ARFF station site is located about 70 feet east of the ATC tower. Access to the site will be via an existing road which is used to reach the ATC tower.

The ARFF station project site will be a total of approximately 50,600 square feet (about 36,000 square feet for the station building plus about 14,600 square feet for the access driveway) and will include:

1. The 6,975 square feet (93 feet wide by 75 feet long) ARFF station building;
2. Parking stalls for 5 vehicles, including one accessible stall;
3. 2,000-gallon above ground vehicle and generator fuel storage tank;
4. 2,000-gallon septic tank and leach field;
5. About 600 feet of 6-inch potable water line used for a fire protection line;
6. About 500 feet of 8-inch potable water line;
7. Approximately 100 feet of underground conduit with electrical line;
8. About 300 feet of 6 feet high security fencing;
9. Approximately 365 feet long by 40 feet wide (14,600 square feet) access driveway connecting to Taxiway A.

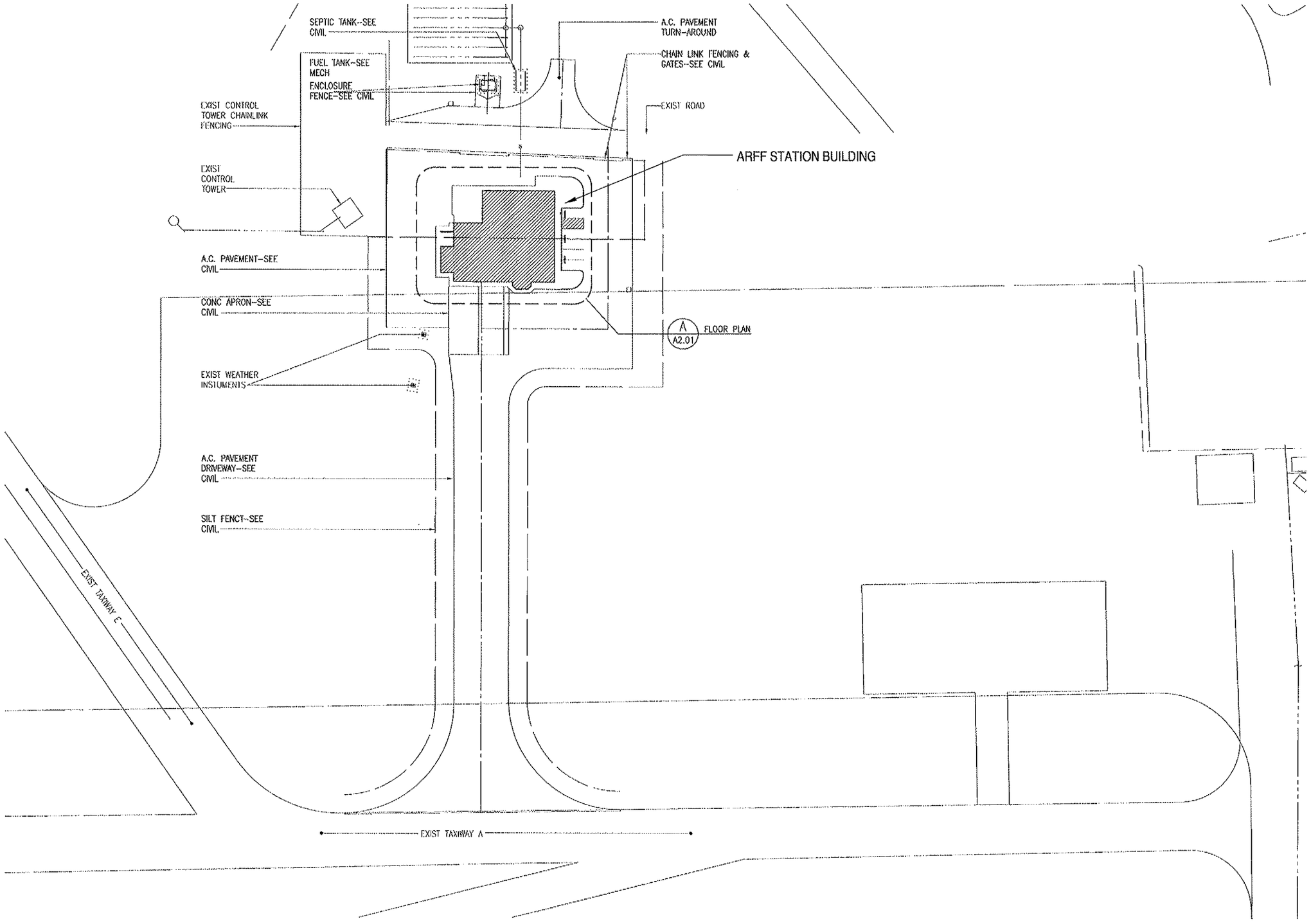
Figure 1.7 shows the project site plan.

There are two FAA automated weather stations located near the concrete apron in the front of the ARFF station building. The two stations provide weather information to aircraft approaching or departing the airport. The site plan shows both existing weather stations are to remain at there present locations.

1.7.2 Building Plan

The replacement ARFF station will be designed to meet the standards outlined in FAA Advisory Circular 150/5210-15A, Airport Rescue and Fire Fighting Station Building Design, dated September 10, 2008. The Advisory Circular sets forth guidelines for the design of the ARFF and the spaces and functions to be included in an ARFF station. The DOT generally follows the FAA guidelines to ensure FAA funding for the ARFF station.

The facility will comply with the requirements of the Americans with Disability Act (ADA).



ARCHITECTURAL SITE PLAN

SCALE: 1" = 40'-0"

FIGURE 1.7

Airports Division
DEPARTMENT OF TRANSPORTATION
HONOLULU HAWAII

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SIGNATURE — 4/30/10 EXPIRATION DATE OF THE LICENSE

DSGN.	DRWN.	CHK'D.	APPD.
CTN	--	CTN	JAA

KEY PLAN / NOTES :

NO.	DATE	REVISIONS

PROJECT TITLE :

MKK ARFF IMPROVEMENTS
AT
MOLOKA'I AIRPORT
MOLOKA'I, HAWAII

PROJECT NO. :

AM2031-14
AIP NO. 3-15-0011-09

SHEET TITLE :

ARCHITECTURAL SITE PLAN

DATE :	SHEET
FEBRUARY 2009	
DWG. NO. :	
	OF SHEETS

The replacement ARFF station building will be approximately 6,975 square feet (93 wide by 75 feet long) and includes the following:

1. Two (2) apparatus parking stalls, one stall to be a drive through type with depth adequate to park one emergency medical trailer in tandem;
2. One (1) covered space to serve as a vehicle fueling station and pickup parking stall;
3. A high volume vehicle exhaust system which automatically switches on when the emergency alarm sounds;
4. Extinguishing/chemical storage room;
5. Emergency generator room with a 150 kilo-watt (KW) generator;
6. 500-gallon above ground aqueous film-forming foam (AFFF) agent storage tank;
7. Fuel dispenser;
8. AFFF fill station and related water outlets;
9. Watch/alarm room;
10. Administrative office;
11. Training center/day room/dining room;
12. Equipment storage room;
13. Fitness room;
14. Kitchen with stove, refrigerator, freezer;
15. Separate men and women restrooms and lockers/showers.
16. Laundry room with washer and dryer;
17. Three dormitory rooms;

Figure 1.8 shows the ARFF building floor plan. Figure 1.9 shows the building elevation.

Plans show the roof of the ARFF station to be about 29'-6" (29 feet, 6 inches) above the surrounding grade. The floor elevation of the ATC tower is about 44 feet above the surrounding grade. A comparison of the building roof height and the floor elevation of the ATC tower shows the ARFF station will not interfere with the tower personnel line-of-sight to the existing aircraft parking apron fronting the passenger terminal building.

The ARFF station building walls will be painted earth tone, similar to other facilities on the Airport. The roof will be a dark brown-reddish color which will be similar to roof on the existing passenger terminal building.

The watch/alarm room, administrative office, training center/day room, fitness room kitchen, and dormitory rooms will have an air condition system. The restrooms and lockers/shower rooms will have natural ventilation. The apparatus parking stalls will also have natural ventilation.

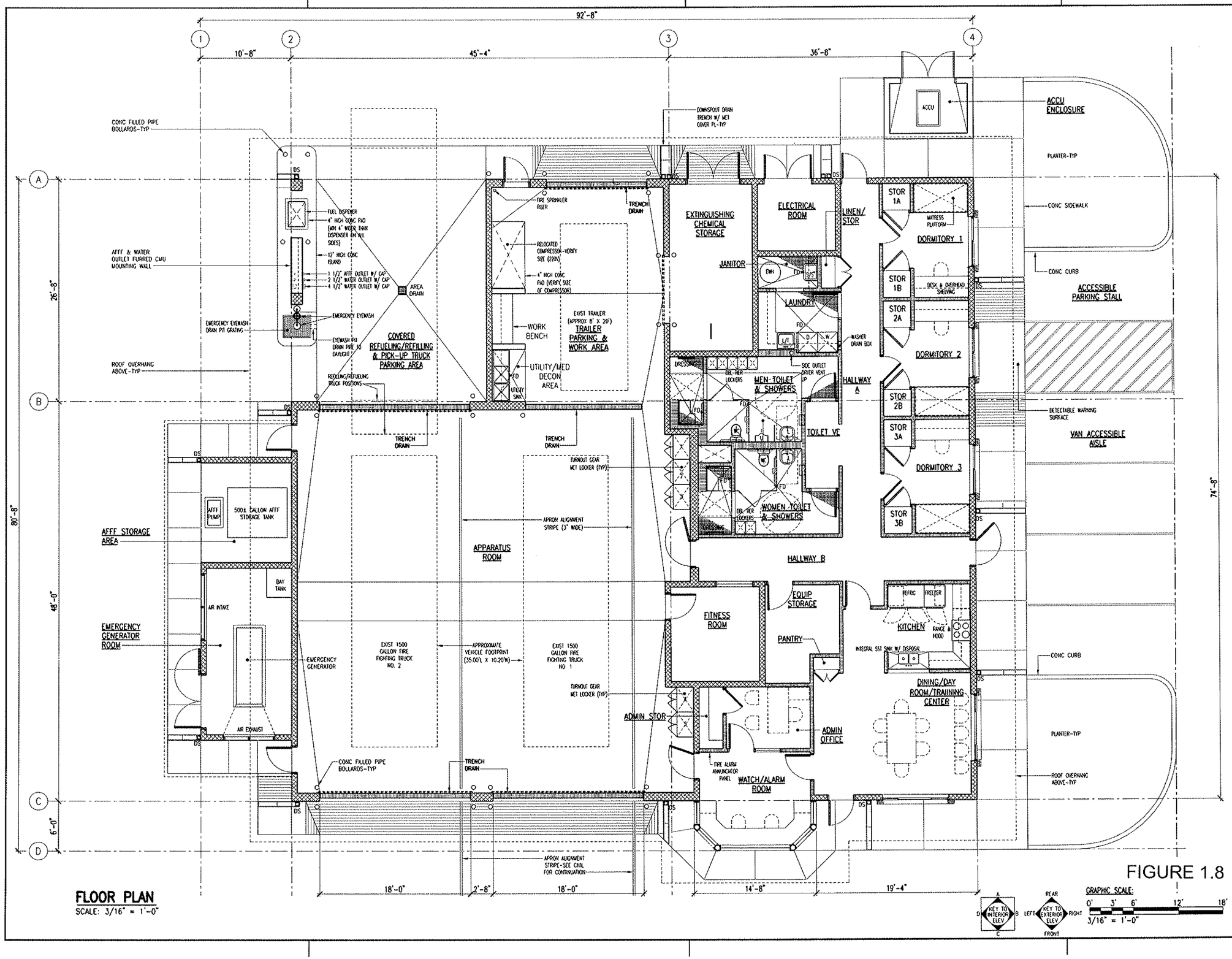
Aqueous film-forming foam (AFFF) is an agent generally used at airports to control aircraft related and fuel fires. AFFF provides a foam blanket that floats on the fuel surface to extinguish the fire. Most types of AFFF are mixed with water for application. AFFF agents are biodegradable and not considered hazardous.

Although most flights at the Molokai Airport occur during the daylight hours, aircraft activity can occur at night at which time the runway lights can be activated by approaching or departing aircraft. The ARFF station will include exterior lighting for operational and security purposes. Shielded fixtures will be used for the exterior lights on the building and for area site lights to mitigate potential impacts to seabirds.

AC 150/5210-15A does not include a requirement or discussion related to use of Leadership in Energy and Environmental Design (LEED) as it applies to design of the ARFF improvements. Notwithstanding the design requirements of AC 150/5210-15A, the provisions of Act 96 (Energy Efficiency; Renewable Energy; Alternate Fuel, Twenty-Third Legislature 2006, HB 2175) will be considered which will include design elements that comply with the LEED Green Building Rating System.

The replacement ARFF station includes elements which can, to the extent possible, be designed to the provisions of Chapter 196, Energy Resources, Hawaii Revised Statutes, and Section 196-9, Energy efficiency and environmental standards for state facilities, motor vehicles, and transportation fuel. Specific elements include considering installation of a solar water heating system, specifying Energy Star equipment, and incorporating recycling as a standard operating practice.

The portions of the ARFF station which include landscaping such as the employee parking area, adjacent walkway, and surrounding building can incorporate drought tolerant native or indigenous species.



FLOOR PLAN
SCALE: 3/16" = 1'-0"

FIGURE 1.8

Airports Division
DEPARTMENT OF TRANSPORTATION
HONOLULU HAWAII

DSGN.	DRWN.	CHK'D.	APPD.

KEY PLAN / NOTES :

NO.	DATE	REVISIONS

PROJECT TITLE :

MKK ARFF IMPROVEMENTS
AT
MOLOKA'I AIRPORT
MOLOKA'I, HAWAII

PROJECT NO. :
AM2031-14
AIP NO. 3-15-0011-09

SHEET TITLE :
FLOOR PLAN

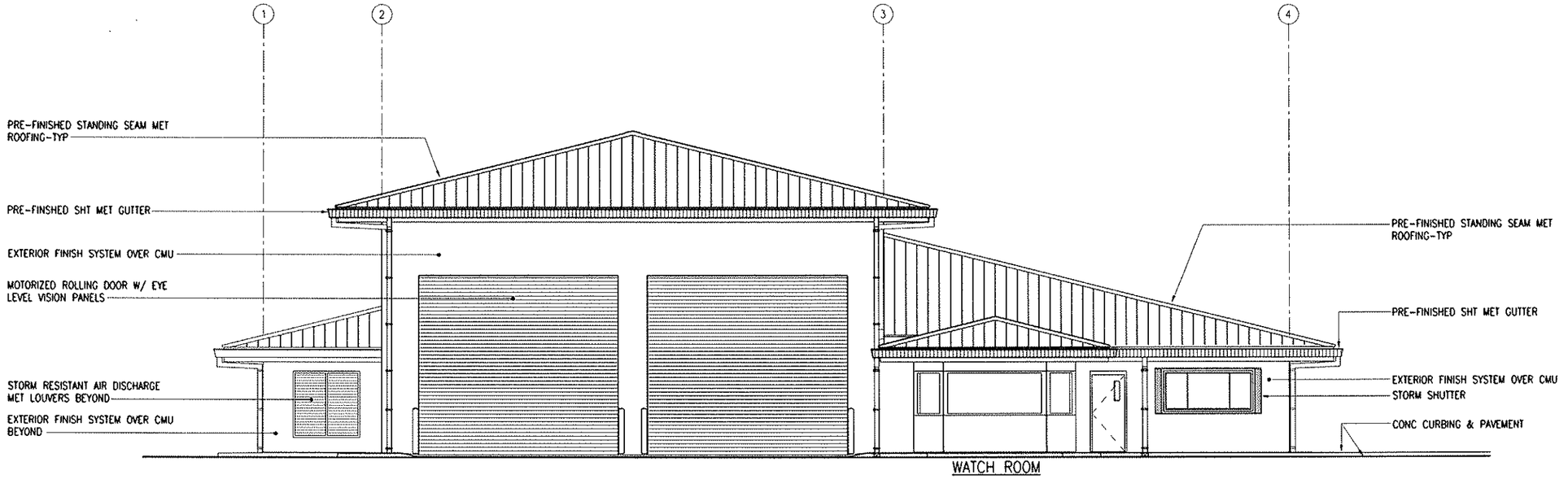
DATE :

DWG. NO. :

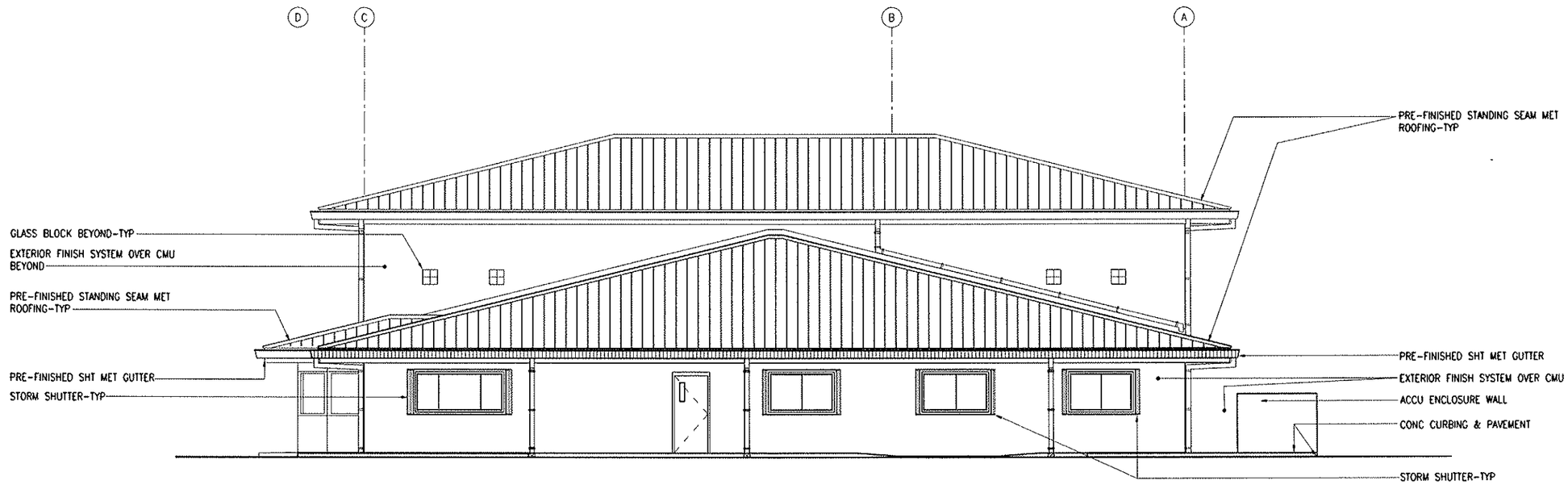
SHEET
OF SHEETS

API PN: 04136.000

Date Plotted: Tue, 10 Feb 2009 - 3:16pm
File Name: \\Projects\projects\04000.000 Projects\04136.000 - Aircraft Rescue & Firefighting Improv_MOLOKAI\EXPORT (Attachments)\Planner (PADC)\a2 01_flr pln-MKK-EA.dwg



1 A3.01 **SOUTH BUILDING ELEVATION**
SCALE: 3/16" = 1'-0"



2 A3.01 **WEST BUILDING ELEVATION**
SCALE: 3/16" = 1'-0"

FIGURE 1.9

Airports Division
DEPARTMENT OF TRANSPORTATION
HONOLULU, HAWAII

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SIGNATURE — EXPIRATION DATE OF THE LICENSE: 4/30/10

DSGN.	DRWN.	CHK'D.	APPD.

KEY PLAN / NOTES :

60% DESIGN SUBMITTAL

NO.	DATE	REVISIONS

PROJECT TITLE :

MOLOKA'I ARFF IMPROVEMENTS
AT
MOLOKA'I AIRPORT
MOLOKA'I, HAWAII

PROJECT NO. :
AM2031-14
AIP NO. 3-15-0011-09

SHEET TITLE :
EXTERIOR BUILDING ELEVATIONS

DATE : FEB 17, 2009
DWG. NO. : A3.01
SHEET X OF X SHEETS

API PN: 04136.000

1.8 Project Operation

1.8.1 Personnel

There are five (5) full-time staff assigned to the ARFF station. The crew size and staffing follows:

- Staffing: Three or four personnel on 42-hour work week; four days straight; 16 hours/day;
- Coverage: 7 days; 5:30 am to 7:30 pm (depending on airline schedules)

Currently most crew members fly in from off-island.

The ARFF crew is also responsible for fighting any airport structural fires until the Maui County Fire Department, located in Hoolehua over three (3) miles away, responds to the Airport emergency. There is a formal mutual aid agreement between the State and County related to fire fighting. However, during this time, the ARFF needs to maintain coverage of the airfield.

1.8.2 Hours of Operation

The ARFF station will operate on a 24 hours per day, 7 days per week basis.

1.9 Preliminary Cost Estimate

The budgeted construction cost, excluding fire fighting equipment, for the ARFF Station is approximately $5.1 million which will be funded by DOT.

1.10 Project Schedule

Construction is expected to start in June 2009 and should require about 12 months to complete. The ARFF station should be in operation by July-August 2010.

2. DESCRIPTION of EXISTING ENVIRONMENT, IMPACTS and MITIGATION MEASURES

2.1 Geology and Soils

2.1.1 Existing Environment

The Island of Molokai was formed during the early to middle Pleistocene Epoch (Ice Age) by basaltic and andesitic lava flows from two shield volcanoes: East Molokai Mountain and West Molokai Mountain. Prior to weathering and erosion, the West Molokai Mountain was a typical elongated basaltic shield-shaped dome. It was built over the northwest and east trending rifts, with a steep slope on the north side, where the lava flows plunged into deep water, and a gentle slope on the east side, where the lava flows banked against the East Molokai dome and formed the Hoolehua Plain. Located on the western side of the West Molokai Mountain, the Hoolehua Plain includes the Molokai Airport.

During the Pleistocene Epoch, there were many sea level changes as a result of widespread glaciation in the continental areas of the world. As the great continental glaciers accumulated, the level of the ocean fell since there was less water available to fill the oceanic basins. Conversely, as the glaciers receded or melted, global sea level rose because more water was available. The land mass of Molokai remained essentially stable during these changes, and the fluctuations were eustatic in nature. These glacio-eustatic fluctuations resulted in stands of the sea, which were both higher and lower relative to the present sea level on Molokai. Chemical and physical weathering have produced a residual lateritic soil cover on the saprolite soils and basalt formation underlying the Airport area.

The Soil Survey of Islands of Kauai, Oahu, Maui, Lanai, and Molokai prepared by the US Department of Agriculture Soil Conservation Service (now Natural Resources Conservation Service) shows the soils on the Airport and project site to be predominantly the Molokai series. This silty clay loam is well-drained and has susceptibility to erosion associated in areas of increasing slopes. Runoff is medium, and the erosion hazard is moderate to severe in other areas.

2.1.2 Impacts and Mitigation Measures

The project site is located on the central portion of Molokai. The County of Maui/Molokai is assigned seismic Zone 2B in the 1997 Uniform Building Code (UBC). As a comparison, seismic Zone 4, the zone with the most stringent building structural requirements, is assigned to the Big Island and the coastal areas of California. Originally enacted in 1927, the UBC was developed by the International Code of Building Officials to guide construction of buildings, structures, and facilities throughout the US. The State of Hawaii and the counties in state, including the County of Maui, have adopted the UBC as the applicable code for constructing buildings, structures, and facilities. County of Maui uses the 1997 UBC.

The purpose of the seismic provisions in the UBC is primarily to safeguard against major structural failures and loss of life, not to limit damage or maintain functions. Structures are to be designed and constructed as a minimum to resist the effects of ground motions from seismic events. The site seismic hazard characteristics in the UBC are based on the seismic zone and proximity of a site to active seismic sources.

The ARFF station will be designed and constructed to meet the requirements of latest version of the UBC. This will ensure that the ARFF station can meet the seismic loadings established for Zone 2B and that the geological conditions at the project site do not adversely affect the building and facilities.

Construction of the ARFF station will require subsurface excavation for placement of the foundations and footings for the building. This will disturb surface and subsurface soils and displace the soils with on-grade slab foundation and footings which will be used for the tower and building. However, this disturbance will typically be to depths of 3 to 3½ feet or less which will not adversely affect the soils and geology of the project site and surrounding area.

2.2 Water Resources and Flood Hazard

2.2.1 Existing Environment

Surface Waters

The project site is located on the in the central portion of Molokai at an elevation of about 454 feet mean sea level (msl). The US Department of the Interior Geological Survey (USGS) topographic map shows there are no natural surface water resources on Molokai Airport or the project site. In addition, the project site and surrounding areas have been cleared and improved for aviation uses and shows no evidence of a wetlands.

The project site is shown in Zone C the September 6, 1989 (Revised) Federal Emergency Management Flood Insurance Rate Map Community Panel Number 150003 0040C for Molokai. Zone C is defined as an area of minimal flooding. Thus, the project site is not subject to flooding.

Groundwater

According to the County of Maui Department of Water Supply, the central portion of Molokai is located over the Kaluakoi aquifer which has a sustainable yield of 2 million gallons per day (MGD). No drinking water sources are shown in the area of Molokai Airport.

Molokai Airport is located mauka of the underground injection control (UIC) line for this area of Molokai. Aquifers mauka of the UIC are considered a drinking water source. The State of Hawaii Department of Health Safe Drinking Water Branch administers the Underground Injection Control (UIC) program which serves to protect the quality of Hawaii's underground sources of drinking water from chemical, physical, radioactive, and biological contamination that could originate from injection well activity.

2.2.2 Impacts and Mitigation Measures

Surface Waters

There are no natural surface water sources on the project site. There will be no discharges from the project site directed to waters of the US or waters of the State of

Hawaii. Further, as the project site and surrounding areas are not identified as a wetlands, there would be no affect on wetlands.

The DOT has National Pollutant Discharge Elimination System (NPDES) Storm Water Permit No. HI R80A413 for Molokai Airport property.

Temporary erosion control measures will be used during construction to prevent runoff to nearby areas. These mitigation measures will include placement of a silt fence around the perimeter of the construction area to prevent surface runoff into adjacent areas. These measures will contain surface flows within the project site during the construction period. In addition, the contract specifications state that the contractor needs to implement best management practices during the construction to minimize runoff from the project site.

Groundwater

The replacement ARFF station will include a kitchen, showers, and toilets. Wastewater from these sources will be routed to a 2,000-gallon septic tank and then routed to a leach field for disposal of the effluent. This wastewater system will require an Individual Wastewater System (IWS) permit under Chapter 62 of Title 11, Hawaii Administrative Rules, Department of Health, Wastewater Systems.

One of the purposes of the Chapter 62 is to ensure the wastewater treatment and disposal system does not result in adverse impacts to surface water and to groundwater resources. Use of a septic tank and leach field will protect the aquifer from adverse impacts from the wastewater treatment and disposal from the ARFF station.

2.3 Agricultural Lands

2.3.1 Existing Conditions

In 1975, the US Department of Agriculture Soil Conservation Service (now Natural Resources Conservation Service) initiated a nationwide inventory of important farmlands. When completed, the inventory included three categories "prime", "unique", and "other farmlands of state-wide and local importance". This classification was later adopted by the State of Hawaii Department of Agriculture under the title "Agricultural Lands of Importance to the State of Hawaii" (ALISH).

The ALISH system defines "prime agricultural land" as the best suited for food, forage, and timber crops. "Unique agricultural land" is defined as land other than prime, used for the production of high-value food crops. "Other agricultural land" is defined as land used for the production of food, feed, fiber and forage crops, but not classified as "prime" or "unique".

According to the ALISH system, Molokai Airport is classified as "existing urban development". The surrounding lands are classified as "prime" agricultural lands.

2.3.2 Impacts and Mitigation Measures

Since Molokai Airport and the project site are not classified as "prime" agricultural lands, use of the lands for the ARFF station will not create an adverse impact to the agricultural activity on Molokai.

2.4 Hazardous Waste

2.4.1 Existing Environment

The ARFF project site has been part of Molokai Airport since 1927 when the Airport was established. The Airport shows no records of uses on the project site which have resulted in hazardous waste disposal or releases. Similarly, the vegetation on the project and surrounding areas did not show signs of distress or other unusual characteristics.

2.4.2 Impacts and Mitigation Measures

The ARFF station will include an above ground 500-gallong tank to store aqueous film-forming foam (AFFF), the agent used to control aircraft related and fuel fires. AFFF provides a foam blanket that floats on the fuel surface to extinguish the fire. Most types of AFFF are mixed with water for application. Since AFFF is biodegradable and not considered hazardous, use of AFFF will not create an adverse impact to the areas on Molokai Airport should such an event occur.

There will be no fire fighting training at the Molokai Airport using AFFF. DOT conducts fire fighting training for personnel assigned to the various ARFF stations at a specifically designed site at Honolulu International Airport.

Fuel for the emergency generator and for vehicles assigned to the ARFF station will be stored in a 2,000-gallon single compartment double-walled, concrete encased above ground tank such as manufactured by Convault. The emergency generator will be located in a separate room on the west side of ARFF station. The fuel dispenser used for fueling the vehicles will be located adjacent to the ARFF station.

It is expected that at least a 1,000 gallons of fuel will be required to provide for the desired 7-day supply of fuel for the emergency generator. In addition, about 300 gallons will be needed during a 6-month period to fuel the ARFF station vehicles.

The fuel tank will be double walled and will contain a leak detection system in the interstitial space between the inner and outer walls to detect leaks. The fuel tank fill pipe will be provided with two or more of the following methods to protect them against overfill. These include: a) direct reading level gauge at the tank which is visible from the fill pipe location; b) valve located within the fill-pipe access to close automatically at a specified fill level; c) a spill containment basin with return to the tank surrounding the fill tube to catch any spills; and d) an audible high level alarm activated by a float switch at a specified fill level. These measures will protect against spills from overfilling when the tank is being filled with fuel. According to the US Environmental Protection Agency (EPA), an above ground double-walled concrete tank will not require a secondary spill containment system around its base.

Underground piping will be used to connect the fuel tank and generator room and the fuel dispenser. The underground piping will be a double-walled pipe with an interstitial space monitoring system to detect leaks. The piping in the generator room will be routed on the surface to allow for detection of leaks. An inventory control and leak detection monitoring panel will be mounted in the watch/alarm room. This leak detection and monitoring system will allow early detection of any leaks in the fuel system which will minimize potential adverse impacts to the surrounding area and to ground water resources.

The County of Maui Fire Department has allowed use of double-walled, above ground fuel storage tanks.

2.5 Biological Resources

2.5.1 Existing Environment

Flora

In 1981, a complete botanical survey was conducted of the Airport as part of the *Environmental Assessment for Molokai Airport Improvements, State Project No. S-103* prepared by the State of Hawaii Department of Transportation Airports Division. The survey showed the vegetation of the Airport and the ARFF project site to be representative of previously extensively altered areas. The project site is vegetated with exotic (non-native) grasses and herbs. No listed or candidate threatened or endangered botanical species as set forth by the US Department of the Interior Fish and Wildlife Service (USFWS) were found on the project site.

Fauna

The 1981 survey of the Airport identified exotic bird species as present. The project site primarily consists of exotic (non-native) grasses and herbs, which typically does not grow to a height for bird habitat. No USFWS or DLNR listed or candidate threatened or endangered avian species were detected on the Airport.

In 1998, as part of the Molokai Airport Master Plan review, the USFWS noted, the Federally endangered dark-romped petrels *(Pterodroma phaeopygia sandwichensis),* which occur on Molokai and nest in the eastern mountains, may be present at the Airport intermittently as they transit between ocean feeding grounds and upland roosts. Young dark-romped petrels are inexperienced fliers and have a natural attraction to bright lights. When flying at night they can be temporarily blinded by bright lights and fly into unseen objects such as utility wires, trees, buildings, and automobiles.

At that time, the USFWS recommended that all artificial lighting at the project site be shielded and oriented toward the ground and away from the coast to help protect this sensitive species.

As part of the Draft EA Pre-Assessment consultation for the ARFF station, in September 2008, the USFWS stated the Newell's shearwater, a species listed as threatened, and the Hawaiian petrel, a species listed as endangered, may traverse the ARFF project site at night during the breeding season (February 1 through December 15). Further, the USFWS included discussion related to the effect of outdoor lighting on the peak fledging period (September 15 to December 15) when the seabirds could become disoriented by the exterior lights resulting in fallout injury and mortality. See Appendix A.

2.5.2 Impacts and Mitigation Measures

Flora

Construction of the ARFF station will require removal of the surface vegetation from the project site and grading for construction of the building and related improvements. Removal of the surface vegetation will not create an adverse impact to the flora of this area of Molokai.

The project site contains no listed or candidate threatened or endangered botanical species as set forth by the USFWS. Thus, construction of the ARFF station will not have an adverse impact to threatened or endangered botanical species.

Fauna

The grasses on the project site does not include habitat normally used by birds. Nor do grasses produce seeds which would serve as food for birds. Thus, the project site does not serve as a feeding and foraging habitat to attract birds. Thus, loss of vegetation would not adversely affect the bird population in the area of the project site or any USFWS or DLNR listed or candidate threatened or endangered species.

Although most flights at the Molokai Airport occur during the daylight hours, aircraft activity can occur at night at which time the runway lights can be activated by approaching or departing aircraft. Thus, the ARFF station will include exterior lighting for operational and security purposes. The need to provide shielded fixtures for these exterior lights will be included in the project building and site design to mitigate potential impacts to any seabirds.

Given the measures to shield exterior lights as part of the project site design, a seabird response plan will not be needed as part of the ARFF station operational requirements.

2.6 Traffic

2.6.1 Existing Environment

State Route 460, Maunaloa Highway, forms the approximate southern boundary of Molokai Airport and provides the primary public access to the western portion of Molokai. Maunaloa Highway is a two-lane road, one lane in each direction, under the control of the State of Hawaii Department of Transportation (DOT). Maunaloa Highway has a functional classification of a major collector, one of eight functional classifications used by the DOT.

Access to the Airport is provided by Keonelele Avenue, which intersects with Maunaloa Highway about 0.5-miles east of the Airport access road. Keonelele Avenue is a paved two-lane road, one lane in each direction, and in generally good condition. Traffic is relatively light on both Keonelele Avenue and the Airport access road. The other Airport access from Keonelele Avenue is northwest of the terminal area and serves as roadway access to the car rental facilities, aircraft hangars and the DOT baseyard facility.

The DOT Highways Division conducts periodic 24-hour traffic counts at various locations on Molokai. The closest traffic counts to the ARFF project site were conducted south of the Airport just east of the intersection of Maunaloa Highway and Launui Street. The most recent data, February 2006, shows the 24-hour two-way traffic volume was 1,153 vehicles, a decrease of about 4.0 percent compared to the June 2001 count of 1,200 vehicles.

2.6.2 Impacts and Mitigation Measures

Traffic impacts related to construction activities will occur while equipment and materials are moved to the ARFF project site. However, this traffic will be short-term occurring during the12-month construction period. This should not create an adverse affect to traffic on Maunaloa Highway and Keonelele Avenue as volumes on these roadways are relatively low.

Transportation of materials to the ARFF project site will be done on public roads. If the materials or equipment are oversize, permits for their transport will be required from the

DOT Highways Division to ensure loads do not exceed restrictions which might apply to a roadway or bridge and to provide proper transport of the material.

At the time of the permit application, the DOT will determine the need for any marking of the loads or escort. However, please note, at this time, it is not expected that a DOT permit will be required to transport materials or equipment used for construction of the Station.

Once construction has been completed, traffic related to the ARFF station will be from the movement of personnel to the station. As previously discussed, five full-time staff are assigned to the ARFF station with each shift having an assignment of 3 to 4 personnel. Travel by this number of personnel to the Airport should not create an adverse impact to traffic on Maunaloa Highway and Keonelele Avenue.

2.7 Air Quality

2.7.1 Existing Environment

The project site is located in the Kaluakoi District, an area characterized by low level of residential and commercial development and almost no industrial facilities. A low level of development generally indicates an absence of stationary and mobile sources of emissions which could affect ambient air quality.

2.7.2 Impacts and Mitigation Measures

Potential short-term adverse air-quality impacts during the construction phase include: 1) generation of fugitive dust from vehicle movements and soil excavation; and 2) exhaust emissions from on-site construction equipment and from construction workers' vehicles traveling to and from the project site. These adverse impacts will be short-term during the period of construction.

Construction activities at the ARFF station must comply with the provisions set forth in the Contract Specification Section 01560 - Environmental Controls which will govern the construction work. Section 01560 references the State of Hawaii, Department of Health, Administrative Rules, Chapter 59,Ambient Air Quality; Chapter 60, Air Pollution Control. The Contract Specifications include, for the duration of the contract, shall maintain all

excavations, embankments, haul roads, permanent access roads, plant sites, waste disposal areas, borrow areas, and all other work areas within or without the project limits free from dust which would cause a hazard to the work, or operations of other Contractors, or to persons or property. Industry-accepted methods of stabilization suitable for the area involved, such as sprinkling or similar methods, will be permitted. Chemical or oil treating shall not be used. In addition, the ARFF project site is approximately 1.16 acres which will mean a relatively small area of disturbance.

Once construction has been completed, operation of the ARFF station will involve personnel driving to and from the Airport. This level of activity will not generate sufficient traffic to adversely affect air quality in the area.

The 150 KW emergency generator will be tested once or twice per month to ensure proper operation in the event of an outage of the MECO system. The testing will involve starting the generator, testing the switching systems, and placing the system under load conditions to ensure proper operation. This testing should require operation of the generator for about 3 to 4 hours per month, or less than 50 hours per year. This level of testing of the emergency generator should not create adverse impacts to the air quality in the area.

2.8 Noise

2.8.1 Existing Environment

The ARFF project site is located within Molokai Airport. The primary noise source at the Airport would be from aircraft operations. The noise levels and noise contours related to aircraft operations were included in the 1999 Master Plan.

Vehicle traffic on Maunaloa Highway and activities conducted at Airport, such as driving vehicles and equipment, would be the primary sources of noise near the project site. Since vehicle traffic on Maunaloa Highway is relatively light near the Airport, noise generated by vehicle traffic should not be significant.

2.8.2 Impacts and Mitigation Measures

Construction activities such as grading, excavating for footings and foundations, and erecting the building will create noise. The equipment used for these activities typically include pick up trucks, excavators, graders, rollers, backhoes, concrete delivery trucks, water tank trucks, hydraulic cranes, and forklifts. Noise generated by this equipment will be short-term during the period of construction. Once construction has been completed, the noise impact will no longer occur.

The County of Maui zoning is "Interim" for the Airport and the State Land Use Commission designation is Agriculture. Title 11 Hawaii Administrative Rule State of Hawaii Department of Health Chapter 46, Community Noise Control identifies maximum permissible sound levels for classes of zoning districts classes using the zoning established by the counties. Since "Interim" is not defined in Chapter 46, the State Land Use designation will need to be used for the Airport and the project site.

According to Chapter 46, the maximum permissible sound level at any point at or beyond the property line is 70 dBA for zoning district Class C, areas equivalent to lands zoned agriculture. The closest residence to the project site, which might be affected by construction activities, is about 1000 ft away.

Once construction has been completed, noise will be generated by vehicles used by ARFF station personnel traveling to the Airport and during normal activities at the ARFF station. This level of traffic should not create an adverse affect to the noise environment in the area of the project site.

The emergency generator will be placed within the generator room as part of the equipment building. The generator and generator room will be designed to suppress noise from the generator during emergency operations and testing. The generator intake shroud is designed to suppress noise and the generator room will have insulation placed along the walls to attenuate noise. Since noise levels decline rapidly with distance from the source, the emergency generator should not create an adverse affect to the noise environment near the residential unit, which lies about 1,000 feet north of the ARFF project site.

As previously stated, construction of the replacement ARFF station will not result in changes to the level of aircraft activity to Molokai Airport. Based on this information, noise levels at the Molokai Airport will not change from those set forth in the 1999 Master Plan, which is the latest available information.

2.9 Archaeological and Cultural Resources

2.9.1 Existing Environment

Section 106 of the National Historic Preservation Act of 1966 (PL 89-665, codified as 16 USC 470f) requires that Federal agencies consider the effects of their projects on historic properties and allow the Advisory Council on Historic Preservation a reasonable opportunity to comment on such projects. The Section 106 review regulations are set forth in CFR 800. In most cases, the State of Hawaii Department of Land and Natural Resources State Historic Preservation Division (SHPD) acts for the Advisory Council to undertake this review process. The SHPD must concur that the proposed project will have "no effect" on historic properties.

In 1981, a detailed archaeological survey of the Airport was conducted prior to the preparation of an *Environmental Assessment for Molokai Airport Improvements, State Project No. S-I031.* The results of this survey indicated that there were no significant archaeological or cultural sites within the existing Airport.

2.9.2 Impacts and Mitigation Measures

As part of the Draft EA Pre-Assessment consultation, the SHPD was notified of the ARFF replacement project. On September 18, 2008, the SHPD stated that it had made a finding that "no historic properties will be affected" because residential development/urbanization and previous grubbing/grading has altered the land. See Appendix A.

In addition to the determination, the State Historic Preservation Division requested the following be included in the construction documents: in the event that historic resources, including human skeletal remains are identified during construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be

protected from additional disturbance and the State Historic Preservation Division needs to be contacted immediately at (808) 692.8015.

2.10 Cultural Impact Assessment

2.10.1 Existing Environment

On April 26, 2000, the Governor approved House Bill No. 2895 H.D.1 as Act 50 which amended Chapter 343 Hawaii Revised Statutes (HRS) to require a cultural impact assessment be included in the preparation of an Environmental Assessment.

A Cultural Impact Assessment/Study (CIA) was undertaken to gather information about traditional cultural practices, ethnic cultural practices, and pre-historic and historic cultural remains that might be affected by the ARFF station. Appendix B contains a summary of the Cultural Impact Assessment. The complete CIA report will be filed with the SHPD and the Office of Environmental Quality Control (OEQC).

The following organizations were contacted regarding the proposed development in Ho'olehua: 1) The Office of Hawaiian Affairs (OHA), Oahu and Molokai Offices; 2) State Historic Preservation Division (SHPD) on Oahu; 3) Department of Land and Natural Resources (DLNR); 4) Hui Mālama I Nā Kūpuna O Hawai'i Nei; 5) Molokai Island Burial Council; 6) Department of Hawaiian Homelands. Community consultation letters were sent in early February to these organizations. In addition, nine *kūpuna* and *kama'āina* of the Ho'olehua area were also contacted for this CIA.

2.10.2 Impacts and Mitigation Measures

A total of 17 community members were contacted (government agency or community organization representatives, or individuals such as residents, cultural and lineal descendants, and cultural practitioners) for the purposes of the CIA. Twelve people responded and 4 *kūpuna* (elders) and or *kama 'āina* (native-born) were interviewed for more in depth contributions to the CIA. Most of the community members and organizations participating in this study agreed that the ARFF project will not directly impact cultural practices in the project area.

In addition, community consultation yielded the following concerns regarding the broader cultural implications and potentially adverse effects on cultural, historic and natural resources, practices and beliefs as result of the proposed redevelopment of the ARFF: I) The main concern expressed by two community members is that this project will support the infrastructure for an expansion of the Moloka' i Airport, although they understand that the proposed ARFF project is separate from the expansion. 2) Related to the above, 3 community members are concerned that an airport expansion, bringing more visitors to Moloka'i, will negatively impact life in Moloka'i. 3) Three community members felt no concern with the proposed development stating that the new building is necessary and on developed land. 4) The O'ahu OHA office had no comment on the assessment at this time and recommended consulting with Walter Ritte, Halona Ka 'opuiki, Glenn Teves and the Ho'olehua Homestead Association. 5) The Moloka'i OHA office expressed no concern with the proposed development as the area is within the existing, developed Moloka'i Airport. 6) The SHPD commented, "A review of the maps... attached and with general knowledge of the area seems to indicate that with the development of the Molokai Airport years ago and with subsequent improvements in that developed area, there does not seem to be a high risk for any impact on burials, cultural resources or any current traditional cultural practices there," and provided a legend and recommended also contacting: the Moloka'i office of OHA, the Moloka'i Department of Hawaiian Homelands and the Moloka'i public library for oral history or works of by the late Kumu Hula (hula teacher), John Kaimikaua. 7) Hui Mālama I Nā Kūpuna 0 Hawaii Nei representative, Edward Halealoha Ayau, stated that he is unaware of any cultural practices that would be affected by the project. However, he did mention that sand from Haleolono was brought in and used to build the airport terminal building (not the present project area). He has spoken with *kūpuna* who worked at the airport at the time, *iwi kūpuna* (ancestral bones/remains) were seen in that sand. 8) Two of the project participants mentioned that the project area may have once been used by King Kamehameha as a training ground for his warriors prior to the invasion of 0' ahu.

Results from the background and community/cultural consultation research for this CIA indicate that most of the study participants agree that the proposed developments for ARFF station will not negatively impact Hawaiian beliefs, resources and practices. However, there is some concern about the possible expansion of the Moloka'I Airport and resultant continued loss of a Hawaiian sense of place that will negatively impact Hawaiian ways of life.

2.11 Infrastructure

2.11.1 Water

Existing Conditions

The Molokai Airport potable water and fire protection service is provided by the Department of Hawaiian Home Lands (DHHL) 12-inch system located along Keonelele Avenue north of the Airport. The DHHL system also services the Hoolehua-Palaau Homesteads. Fire protection is provided by 6-inch lines and hydrants located within the Airport.

The source of potable water is two wells located in Kalae which pump groundwater into the potable water system. The primary storage facilities are two 3.5-million gallon reinforced concrete reservoirs.

Impacts and Mitigation Measures

The ARFF station will be serviced by an 8-inch potable water line which will be extended about 600 feet along the ATC tower access road. A 6-inch potable water line for fire protection will also be extended about 500 feet to the ARFF station. Water demand for the ARFF station is expected to be about 550 gallons/day. This level of water usage will not have an adverse affect to the DHHL water system, including the water sources.

2.11.2 Wastewater

Existing Conditions

Wastewater generated at the Airport is collected through a series of lines and routed to the septic tank located near the existing ARFF station. An 8-inch pipe transports effluent under Runway 5-23 into a septic tank near the southern boundary of the Airport, adjacent to Maunaloa Highway. The effluent from the septic tank flows through a line under Maunaloa Highway and then discharges into a leaching field across the road from the Airport.

Impacts and Mitigation Measures

The ARFF station will include construction of an individual wastewater collection system which will route flows to a 2,000-gallon septic tank located about 40 feet from the north side of building. The treated effluent from the septic tank will be disposed in a leach field located near the tank. The septic tank and leach field will be subject to requirements set forth in the State of Hawaii Department of Health Hawaii Administrative Rules, Title 11, Department of Health Chapter 62 Wastewater Systems. Use of a septic tank to treat wastewater and disposal of effluent in a leach field is allowed under the Department Health rules.

2.11.3 Solid Waste

Existing Conditions

Solid waste from the existing ARFF station is collected and taken to a dumpster located on the Airport. A private commercial disposal company picks up the solid waste from the dumpster for disposal at the landfill

Impacts and Mitigation Measures

Solid waste disposal for the ARFF station will continue to follow current disposal practices and procedures as the existing ARFF station.

2.11.4 Electrical and Communication

Existing Conditions

Electrical power service to the Airport is provided by Maui Electric Company via an overhead pole line along Keonelele Avenue. Within the Airport, the main electrical system consists of underground ductlines and manholes and a 12,470V/120-240V, 100 KVA pad-mounted transformer located on the east side of the existing ARFF building. The transformer serves the passenger terminal building, runway lights, parking area lights, apron lights, ARFF building, ATC tower and the DOT baseyard facility.

A 40 kilo-watt (KW) diesel engine generator provides emergency power for runway, terminal and restroom lighting and selected terminal outlets for airline computers. An above ground l00-gallon diesel fuel tank supplies fuel to the generator.

Telephone service is provided by the Hawaiian Telephone Company through overhead lines along Keonelele Avenue. Underground cables extend from the overhead lines to the passenger terminal building, ARFF, ATC tower, ground transportation buildings and the DOT baseyard facility.

Impacts and Mitigation Measures

Electrical service to the ARFF station will be provided by a new 112.5 KVA pad-mounted transformer located on the northeast side of the ARFF station building. A 12,470V primary electric feeder will be extended from an existing Maui Electric Company handhole located along the ATC tower access road. The load requirements will be about 80 KVA.

A 150 KW emergency generator located in the generator room will be used to provide power to the ARFF station in the event of an outage of commercial service.

Telephone, data and CATV service to the ARFF station will be extended to the building via an existing communications handhole located along the ATC tower access road. A new communications handhole will be provided on the north side of the ARFF station building for the telephone, data and CATV service entrance cables.

2.12 Federal Environmental Clearances

The ARFF station will use funds provided by the FAA. The following sub-sections address the proposed project's relationship to other Federal authorities.

2.12.1 Archaeological and Historic Preservation Act of 1974 (16 USC Section 461)

The declaration of national policy set forth in 16 USC 461 states, "It is declared that it is a national policy to preserve for public use historic sites, buildings, and objects of national significance for the inspiration and benefit of the people of the United States. "

The 1981 Environmental Assessment for Molokai Airport indicates the Airport was established in 1927. Further, the document indicates that, prior to development of the Airport, the lands were used for the agricultural purposes.

Previous agricultural and airport uses have displaced any former uses such that there are no known archaeological or historic features at the project site. As stated in Section 2.9, the DOT has consulted with the State of Hawaii Historic Preservation Division (SHPD). On September 18, 2008, the SHPD stated that it had made a finding that "no historic properties will be affected" as residential development/urbanization and previous grubbing/grading has altered the land. The construction documents for the ARFF will state: in the event that historic resources, including human skeletal remains are identified during construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance and the State Historic Preservation Division needs to be contacted immediately at (808) 692.8015.

2.12.2 Clean Air Act (42 USC § 7506 (C))

During the late 1940s serious smog incidents in Los Angeles and Donora, Pennsylvania raised public awareness and concern about this issue once again. In 1955, the government decided that this problem needed to be dealt with on a national level. The Air Pollution Control Act of 1955 was the first in a series of clean air and air quality control acts which are still in effect and continue to be revised and amended.

Among the purposes of the Clean Air Act was (1) to protect and enhance the quality of the Nation's air resources so as to promote the public health and welfare and the productive capacity of its population; (2) to initiate and accelerate a national research and development program to achieve the prevention and control of air pollution; (3) to provide technical and financial assistance to State and local governments in connection with the development and execution of their air pollution prevention and control programs; and (4) to encourage and assist the development and operation of regional air pollution prevention and control programs.

As discussed in Section 2.7, air quality in the Kaluakoi District is characterized by low level of residential and commercial development and almost no industrial facilities. A low level of development generally indicates an absence of stationary and mobile sources of emissions which could affect ambient air quality.

Grading and excavation will be required for construction of the ARFF station building ad access driveway. Construction activities must comply with the Department of Health Air Pollution Control rules with respect to fugitive dust during construction.

Emissions from the construction vehicles will slightly degrade air quality for the short period of time they are in operation. However, all applicable emission and ambient air quality standards will continue to be met. Consequently, no adverse health effects from this source are anticipated.

Once construction has been completed, operation of the ARFF station will involve personnel driving to and from the Airport. This level of activity will not generate sufficient traffic to adversely affect air quality in the area.

The 150 KW emergency generator will be tested once or twice per month to ensure proper operation in the event of an outage of the MECO system. The testing will involve starting the generator, testing the switching systems, and placing the system under load conditions to ensure proper operation. This testing should require operation of the generator for about 3 to 4 hours per month, or less than 50 hours per year. This level of testing of the emergency generator will not create adverse impacts to the air quality in the area.

The electrical power consumed in the operation of the ARFF station will not require additional power generation as compared to the existing facilities. Thus, additional fuel consumption and gaseous emissions from the power generation will represent a small portion of total power use on Molokai.

2.12.3 Coastal Barrier Resources Act, (16 USC 1451)

In 1982, the US Congress passed the Coastal Barrier Resources Act (CBRA) (16 USC 3501) which established the John H. Chafee Coastal Barrier Resources System (CBRS), comprised of undeveloped coastal barriers along the Atlantic, Gulf, and Great Lakes coasts. The law encourages the conservation of hurricane prone, biologically rich coastal barriers by restricting Federal expenditures that encourage development, such as Federal flood insurance through the National Flood Insurance Program

The Coastal Barrier Resources Reauthorization Act of 2000 reauthorized the Coastal Barrier Resources Act (CBRA) and directed the US Fish and Wildlife Service to complete a Digital Mapping Pilot Project that includes digitally produced draft maps for up to 75 John H. Chafee Coastal Barrier Resources System (CBRS) areas and a report to Congress that describes the feasibility and costs for completing digital maps for all CBRS areas.

The purpose of the CBRA is to minimize the loss of human life, wasteful expenditure of Federal revenues, and the damage to fish, wildlife, and other natural resources associated with the coastal barriers along the Atlantic and Gulf coasts and along the Great Lakes by restricting future Federal expenditures and financial assistance which have the effect of encouraging development along coastal barriers.

The ARFF station project site is located about 3.5 miles inland from the shoreline on the southern coast of Molokai. Thus, the ARFF station will not involve construction of facilities along coastal barriers.

2.12.4 Coastal Zone Management Act (16 USC § 1456(C)(1))

In 1972, the US Congress enacted the Federal Coastal Zone Management Act to ensure that each Federal agency undertaking an activity within or outside the coastal zone that affects any land or water use or natural resource of the coastal zone shall be carried out in a manner which is consistent to the maximum extent practicable with the enforceable policies of approved State management programs. Each Federal agency carrying out an activity subject to the Act shall provide a consistency determination to the relevant State agency designated under section 1455(d)(6) of this title at the earliest practicable time.
In 1977, Hawaii enacted Chapter 205A, HRS, Hawaii Coastal Zone Management (CZM) Program. The CZM area encompasses the entire state, including all marine waters seaward to the extent of the state's police power and management authority, including the 12-mile U.S. territorial sea and all archipelagic waters.

The Hawaii CZM Program focuses on ten policy objectives:

- Recreational Resources. To provide coastal recreational opportunities accessible to the public and protect coastal resources uniquely suited for recreational activities that cannot be provided elsewhere.

- Historic Resources. To protect, preserve, and where desirable, restore those natural and manmade historic and prehistoric resources in the coastal zone management area that are significant in Hawaiian and American history and culture.

- Scenic and Open Space Resources. To protect, preserve, and where desirable, restore or improve the quality of coastal scenic and open space resources.

- Coastal Ecosystems. To protect valuable coastal ecosystems, including reefs, from disruption and to minimize adverse impacts on all coastal ecosystems.

- Economic Uses. To provide public or private facilities and improvements important to the State's economy in suitable locations; and ensure that coastal dependent development such as harbors and ports, energy facilities, and visitor facilities are located, designed, and constructed to minimize adverse impacts in the coastal zone area.

- Coastal Hazards. To reduce hazard to life and property from tsunami, storm waves, stream flooding, erosion, subsidence, and pollution.
- Managing Development. To improve the development review process, communication, and public participation in the management of coastal resources and hazards.

- Public Participation. To stimulate public awareness, education, and participation in coastal management; and maintain a public advisory body to identify coastal management problems and provide policy advice and assistance to the CZM program.

- Beach Protection. To protect beaches for public use and recreation; and locate new structures inland from the shoreline setback to conserve open space and to minimize loss of improvements due to erosion.

- Marine Resources. To implement the State's ocean resources management plan.

Other key areas of the CZM program include: a permit system to control development within a Special Management Area (SMA) managed by each County and the Office of Planning; a Shoreline Setback Area which serves as a buffer against coastal hazards and erosion, and protects view-planes; and marine and coastal resources. Finally, a Federal Consistency provision requires that Federal activities, permits and financial assistance be consistent with the Hawaii CZM program.

The ARFF station project site is located about 3.5 miles from the coastline and not located within the County of Maui SMA. The ARFF station does not involve the placement, erection, or removal of materials near the coastline. Activities at the ARFF station project site do not have the potential to significantly affect coastal resources. Finally, it is consistent with the CZM objectives that are relevant to this type of project.

A copy of this Draft EA will be provided to the Office of Planning, which is attached to the State of Hawaii Department of Business, Economic Development, and Tourism. The Department's response is expected to confirm the consistency of the project with the CZM Act.

2.12.5 Endangered Species Act (16 USC 1536(A)(2) and (4))

The Endangered Species Act (16 USC Section 1531-1544, as amended) provides broad protection for species of fish, wildlife, and plants that are listed as threatened or endangered in the U.S. or elsewhere. The Act mandates that Federal agencies seek to conserve endangered and threatened species and use their authorities in furtherance of the Act's purposes. Provisions are made for listing species, as well as for recovery plans and the designation of critical habitat for listed species.

16 USC Section 1536, Interagency Cooperation, states each Federal agency shall, in consultation with and with the assistance of the Secretary, insure that any action authorized, funded, or carried out by such agency (an "agency action") is not likely to jeopardize the continued existence of any endangered species or threatened species or result in the destruction or adverse modification of habitat of such species which is

determined by the Secretary, after consultation as appropriate with affected States, to be critical, unless such agency has been granted an exemption for such action.

As discussed in Section 2.6, the 1981 flora and fauna surveys did not locate any plant or animal species currently listed or proposed for listing as endangered or threatened species at Molokai Airport. At that time, the USFWS recommended that all artificial lighting at the project site be shielded and oriented toward the ground and away from the coast to help protect the sensitive seabird species.

As part of the Draft EA Pre-Assessment consultation, in September 2008, the USFWS stated the Newell's shearwater, a species listed as threatened, and the Hawaiian petrel, a species listed as endangered, may traverse the ARFF station project site at night during the breeding season (February 1 through December 15). Further, the USFWS included discussion related to the effect of outdoor lighting on the peak fledging period (September 15 to December 15) when the seabirds could become disoriented by the exterior lights resulting in fallout injury and mortality. See Appendix A.

As further discussed in Section 2.5, although most flights at the Molokai Airport occur during the daylight hours, aircraft activity can occur at night at which time the runway lights can be activated by approaching or departing aircraft. Thus, the ARFF station will include exterior lighting for operational and security purposes. The need to provide shielded fixtures for these exterior lights will be included in the project building and site design to mitigate potential impacts to any seabirds.

Given the measures to shield exterior lights as part of the project site design, a seabird response plan will not be needed as part of the Station's operational requirements.

Copies of the Draft EA will be provided to the U.S. Fish and Wildlife Service and to the State Department of Land and Natural Resources (DLNR) for review and comment.

2.12.6 Environmental Justice, Executive Order 12898

Executive Order 12898, Environmental Justice, was signed on February 11, 1994. The intent of Executive Order 12898 (full title Federal Actions to Address Environmental Justice to Minority and Low Income Populations) is to avoid disproportionately high adverse human health or environmental effects of projects on minority and low income

populations. Executive Order 12898 also requires Federal agencies ensure that minority and low income communities have adequate access to public information related to health and the environment.

Molokai Airport was established in 1927 and has been an airfield open to the public since that time, although there may have been restrictions to access during the World War II period when the airfield under military control. The ARFF station is located within Molokai Airport and the environmental effects will primarily be related to construction activities near the project site. The lands and properties surrounding the Airport will not be subject to adverse environmental effects during construction or operation of the ARFF station. Thus, based on these considerations, the ARFF station will not result in a disproportionately high adverse human health or environmental effect on minority and low income populations.

2.12.7 Floodplain Management, Executive Order 11988 as amended by Executive Order 12148

Executive Order 11988, Floodplain Management, dated May 24, 1977 requires Federal agencies to take action to reduce the risk of flood loss, restore the natural and beneficial values of floodplains, and minimize the impacts of floods on human safety, health, and welfare. Executive Order 12148, July 20, 1979, amended Executive Order 11988. The main feature of the amendment added that agencies with responsibilities for Federal real estate properties and facilities shall, at a minimum, require the construction of Federal structures and facilities to be in accordance with the criteria of the National Flood Insurance Program.

As discussed in Chapter 2.2, the ARFF station project site is shown in Zone C in the September 6, 1989 (Revised) Federal Emergency Management Flood Insurance Rate Map Community Panel Number 150003 0040C for Molokai. Zone C is defined as area of minimal flooding. Thus, the project site is not subject to flooding.

2.12.8 Protection of Wetlands Executive Order 11990

Executive Order 11990, Protection of Wetlands, dated 1977 requires Federal agencies to avoid, preserve, or mitigate effects of new construction projects on lands which have been designated wetlands.

As discussed in Section 2.2, there are no surface water resources on the ARFF station project site. Further, no conditions were observed which would classify the project site as a wetlands.

Copies of the Draft EA will be sent to the US Department of the Army Honolulu District and to US Fish and Wildlife Service, Pacific Island Eco-Region for environmental review for this project.

2.12.9 Farmland Protection Policy Act (7 USC § 4202(8))

The US Congress adopted the Farmland Protection Policy Act (FPPA) (Public Law 97-98) on December 22, 1981. The US Department of Agriculture (USDA), Natural Resources Conservation Service (NRCS) has national leadership for administering the FPPA. The effective date of the FPPA rule (part 658 of Title 7 of the Code of Federal Regulations) is August 6, 1984.

The stated purposes of the FPPA are to:

- Minimize the extent to which Federal programs contribute to the unnecessary and irreversible conversion of farmland to nonagricultural uses.

- Assure that Federal programs are administered in a manner that, to the extent practicable, will be compatible with State, unit of local government, and private programs and policies to protect farmland.

"Farmland", as used in the FPPA, includes prime farmland, unique farmland, and land of statewide or local importance. "Farmland" subject to FPPA requirements does not have to be currently used for cropland.

As discussed in Chapter 2.3, the ARFF station project site is classified as "existing urban development". Since Molokai Airport and the ARFF station project site are not classified as "prime" agricultural lands, the ARFF station project is in substantial compliance with the FPPA.

2.12.10 Fish and Wildlife Coordination Act (16 USC § 661-666)

The Fish and Wildlife Coordination Act, as amended, authorizes the Secretaries of Agriculture and Commerce to require consultation with the Fish and Wildlife Service and the fish and wildlife agencies of States where the "waters of any stream or other body of water are proposed or authorized, permitted or licensed to be impounded, diverted... or otherwise controlled or modified" by any agency under a Federal permit or license. Consultation is to be undertaken for the purpose of "preventing loss of and damage to wildlife resources."

As documented in Chapter 2.2, the ARFF station project site does not contain surface water resources. Thus, construction of the ARFF station will not result in a diversion of any water body and will not result in impacts on fish or wildlife resources.

Copies of the Draft EA will be sent to the US Fish and Wildlife Service and the State Department of Land and Natural Resources for review and comment.

2.12.11 National Historic Preservation Act of 1966 (16 USC § 470 (F))

Section 106 of the National Historic Preservation Act of 1966 (PL 89-665, codified as 16 USC 470f) requires that Federal agencies consider the effects of their projects on historic properties and allow the Advisory Council on Historic Preservation a reasonable opportunity to comment on such projects. The Section 106 review regulations are set forth in CFR 800. In most cases, the State of Hawaii Department of Land and Natural Resources Historic Preservation Division (SHPD) acts for the Advisory Council to undertake this review process. The SHPD must concur that the proposed project will have "no effect" on historic properties.

Previous agricultural and airport uses have displaced any former uses such that there are no known archaeological or historic features at the project site. As stated in Section 2.9, the DOT has consulted with the SHPD. On September 18, 2008, the SHPD stated that it had made a finding that "no historic properties will be affected" as residential development/urbanization and previous grubbing/grading has altered the land. The construction documents for the ARFF will state: in the event that historic resources, including human skeletal remains are identified during construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from

additional disturbance and the State Historic Preservation Division needs to be contacted immediately at (808) 692.8015.

Copies of the Draft EA will be sent to the SHPD and the Office of Hawaiian Affairs to ensure compliance with these statutes.

2.12.12 Wild and Scenic Rivers Act (16 USC 1271-1287)

The Wild and Scenic Rivers Act was first passed in October 1968 and has been amended a number of times. (16 U.S.C. §§ 1271-1287, October 2, 1968, as amended 1972, 1974-1976, 1978-1980, 1984, 1986-1994 and 1996.)

This Act established a National Wild and Scenic Rivers System for the protection of rivers with important scenic, recreational, fish and wildlife, and other values. Rivers are classified as wild, scenic or recreational. The Act also designated specific rivers for inclusion in the System and prescribes the methods and standards by which additional rivers may be added. The Act contains procedures and limitations for control of lands in federally administered components of the System and for disposition of lands and minerals under Federal ownership. Hunting and fishing are permitted in components of the System under applicable federal and state laws.

The purpose of this act, as stated in Section (b) of its preamble is as follows:

> *It is hereby declared to be the policy of the United States that certain selected rivers of the Nation which, with their immediate environments, possess outstandingly remarkable scenic, recreational, geologic, fish and wildlife, historic, cultural, or other similar values, shall be preserved in free-flowing condition, and that they and their immediate environments shall be protected for the benefit and enjoyment of present and future generations. The Congress declares that the established national policy of dam and other construction at appropriate sections of the rivers of the United States needs to be complemented by a policy that would preserve other selected rivers or sections thereof in their free-flowing condition to protect the water quality of such rivers and to fulfill other vital national conservation purposes.*

There are no rivers in Hawaii designated as wild and scenic as part of the Wild and Scenic Rivers Act.

As discussed Section 2.2, there are no surface water resources on the ARFF station project site. Development of the ARFF station does not have the potential to affect the hydrology, water quality, or aquatic resources. Thus, ARFF station project is consistent with the provisions of the Wild and Scenic Rivers Act.

2.12.13 Fishery Conservation and Management, Magnuson-Stevens Fishery Conservation and Management Act (16 USC Sec. 1801)

The Congress found and declared the following:

> *(1) The fish off the coasts of the United States, the highly migratory species of the high seas, the species which dwell on or in the Continental Shelf appertaining to the United States, and the anadromous species which spawn in United States rivers or estuaries, constitute valuable and renewable natural resources. (2) Certain stocks of fish have declined to the point where their survival is threatened, and other stocks of fish have been so substantially reduced in number that they could become similarly threatened (3) Commercial and recreational fishing constitutes a major source of employment and contributes significantly to the economy of the Nation. (4) International fishery agreements have not been effective in preventing or terminating the overfishing of these valuable fishery resources. (5) Fishery resources are finite but renewable. If placed under sound management before overfishing has caused irreversible effects, the fisheries can be conserved and maintained so as to provide optimum yields on a continuing basis. (6) A national program for the conservation and management of the fishery resources of the United States is necessary to prevent overfishing, to rebuild overfished stocks, to insure conservation, to facilitate long-term protection of essential fish habitats, and to realize the full potential of the Nation's fishery resources. (7) A national program for the development of fisheries which are underutilized or not utilized by the United States fishing industry, including bottom fish off Alaska, is necessary to assure that our citizens benefit from the employment, food supply, and revenue which could be*

generated thereby. (8) The collection of reliable data is essential to the effective conservation, management, and scientific understanding of the fishery resources of the United States. (9) One of the greatest long-term threats to the viability of commercial and recreational fisheries is the continuing loss of marine, estuarine, and other aquatic habitats. (10) Pacific Insular Areas contain unique historical, cultural, legal, political, and geographical circumstances which make fisheries resources important in sustaining their economic growth.

The ARFF station project site does not include water resources which supports fishery resources. Thus, the ARFF station project will not have an adverse effect on fishery resources.

2.12.14 US Department of Transportation Act Section 4 (F); (49 USC Section 303)

The Department of Transportation (DOT) Act of 1966 Section 4(f) included specific provisions providing special protection to publicly owned parks, recreational areas, wildlife and waterfowl refuges, and all historic sites. In 1983, the DOT Act was codified and Section 4(f) became 49 USC Section 303. (Note, some documents still use the term Section 4(f) when referring to this issue.) Under Section 303, the DOT may approve a project requiring the use of publicly owned land of a park, recreation area, or wildlife and waterfowl refuges, or historic site, only if there is no prudent and feasible alternative to using that land, and the project includes all possible planning to minimize harm to the park, recreation area, wildlife refuge, or historic site.

The ARFF station is not located on public property under the jurisdictional authority of 49 USC Section 303.

2.12.15 Department of Army Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) and Federal Water Pollution Control Act (33 USC 1341)

The Department of the Army Corps of Engineers (COE) regulates activities in the nation's waters. Section 10 of the Rivers and Harbors Act of 1899 (33 USC 403) prohibits the obstruction or alteration of navigable waters of the U.S. without a permit

from COE. (Navigable waters of the U.S. means those waters that are subject to the ebb and flow of the tide shoreward of the mean high water mark and/or presently used, or have been used in the past or may be susceptible to use to transport interstate or foreign commerce.)

Section 404 of the Federal Water Pollution Control Act (33 USC 1341), commonly called the Clean Water Act, prohibits the discharge of dredged or fill material into waters of the U.S. without a permit from the COE. (Waters of the U.S. is a broader term than navigable waters of the U.S. Waters of the U.S. includes adjacent wetlands and tributaries to navigable waters and other waters where degradation or destruction of which could affect interstate or foreign commerce.) A structure is considered fill material along with other fill or dredged materials placed in the waters of the U.S. COE permits continue in effect until they automatically expire or are modified, suspended, or revoked. The permit will specify time limits for completing the work and may also specify a date by which the work must be started.

As discussed Section 2.2, there are no surface water resources on the ARFF station project site. Development of the ARFF station project site does not have the potential to affect the waters of the U.S.

3. RELATIONSHIP to PLANS, POLICIES and CONTROLS

3.1 Airport Layout Plan

Molokai Airport is owned and operated by the State of Hawaii. The Airport Layout Plan, prepared by the DOT and submitted to the FAA for approval, is the basic land use and facilities plan for the Airport. The projects and improvements at the Airport need to be set forth on the Airport Layout Plan to qualify for funding participation by the FAA.

The ARFF station is shown at the project site near the ATC tower in the 1999 Airport Layout Plan for Molokai Airport. Thus, the ARFF station is consistent with the 1999 Airport Layout Plan.

3.2 Hawaii State Plan

The Hawaii State Plan, adopted in 1978 and revised in 1988, establishes the overall theme, goals, objectives, and priority guidelines to guide the future long-range development of the State. The ARFF station project supports and is consistent with the following State Plan objectives and policies:

Section 226-6 Objectives and policies for the economy - in general.

> *(b) (6) Strive to achieve a level of construction activity responsive to, and consistent with, state growth objectives.*

The ARFF station will involve construction of replacement facilities at a new site. The ARFF station will increase the level of construction activity on Molokai during the period of construction which will enhance the state's growth objectives.

> *(b) (11) Maintain acceptable working conditions and standards for Hawaii's workers.*

The ARFF station will provide personnel with a facility designed to current requirements which will replace the existing inadequate ARFF station. The ARFF station will ensure a facility from which personnel can adequately respond in the event of an emergency situation at the Molokai Airport.

Section 226-14 Objectives and policies for facility systems – general.

(b) (3) Ensure that required facility systems can be supported within resource capacities and at reasonable cost to the user.

The ARFF station has been planned to provide necessary spaces to permit personnel to perform their assigned functions. The ARFF station has been designed to support these functions at reasonable cost to the Airport.

Section 226-17 Objectives and policies for facility systems--transportation.

(b) (2) Coordinate state, county, federal, and private transportation activities and programs toward the achievement of statewide objectives.

The ARFF station has been planned to meet the requirement of the US Department of Transportation Federal Aviation Administration (FAA) in Advisory Circular (AC) 150/5210-15A, Airport Rescue and Fire Fighting Station Building Design, dated September 10, 2008, which governs ARFF building requirements. The DOT has coordinated the ARFF station design with the FAA to ensure compliance the FAA AC.

3.3 Land Use Plans and Policies

3.3.1 State Land Use District

The Hawaii Land Use Law of Chapter 205, Hawaii Revised Statutes, Land Use Commission, classifies all land in the State into four land use districts: Urban, Agriculture, Conservation, and Rural. The State Land Use Commission designation for the Molokai Airport is in the Agricultural District. According to Chapter 205-4.5 (b), Hawaii Revised Statutes (HRS), as amended, uses not expressly permitted in subsection (a) shall be prohibited, except the uses permitted as provided in Sections 205-6 Special Permit and 205-8, Nonconforming uses.

As previously discussed, Molokai Airport was established in 1927 and, since then, has served as the primary airport for Molokai.

3.3.2 Molokai Community Plan

The Molokai Community Plan was prepared in 1984 and amended in December 2001 by the adoption of Ordinance 3022, Bill No. 106 (2001). The purpose of the Molokai Community Plan is to advance planning goals, objectives, policies, and implementation considerations to guide decision making to 2010. The Community Plan is also a policy document for the long-range comprehensive development of the island of Molokai.

The Molokai Airport, including the project site, is designated "Airport" in the County of Maui Molokai Community Plan dated 2001.

3.3.3 County of Maui Zoning

The County of Maui zoning designation is Interim for Molokai Airport. The Interim zoning designation is used until a formal designation can be adopted for the Airport by the County of Maui. The permitted uses are limited in the Interim zone. However, publicly-owned buildings are a permitted use in the Interim zone. Also, since the Airport was established in 1927, the existing uses at the Airport would be considered non-conforming. However, since the uses within in the Airport are publicly owned, the Airport, including the ARFF station, would be consistent with the County of Maui zoning.

3.3.4 County of Maui Special Management Area

The Coastal Zone Management Act contains the general objectives and policies upon which all counties within the State have structured specific legislation which created Special Management Areas (SMA). Any development within the Special Management Area boundary requires a SMA Use permit (SMP) which is administered by the County of Maui.

The ARFF station project site is not located within the County's SMA and will not require an SMP.

4. ALTERNATIVES TO THE PROPOSED ACTION

4.1 No Action Alternative

The No Action alternative would retain the existing substandard ARFF station and related temporary 1,100-square foot temporary housing facility located to the west of the existing ARFF station. The existing ARFF building contains space to park one ARFF truck, storage space for fire fighting equipment, an open area with a table used by the crew for meetings and related activities.

The existing facility has a number of deficiencies noted by the FAA for both crew accommodations and equipment storage. Furthermore, the current building is not in compliance with AC 150/5210-15 which governs ARFF building requirements. The FAA District inspection report dated May 1, 2003 cites the Molokai Airport ARFF building as not being in compliance with requirements set forth by Title 14 CFR Part 139, the Airport Certification Manual and the Airport Operating Certificate. Based on these considerations, the No Action alternative is not considered a feasible alternative.

4.2 Remodel–New Construction Alternative

This alternative would remodel the existing ARFF facility so that it accommodates crew and· equipment and build a new ARFF vehicle building, co-located with the current ARFF building. A temporary storage space/module would be needed to hold equipment and supplies during the construction. Infrastructure that supports operations, e.g., water re-fill; communications, and related system must need to be maintained during the remodel-construction period.

Currently the fence-line at the rear of the ARFF building is 12 feet away which makes expansion towards the rear of the current building infeasible. Expansion of the ARFF building towards the passenger terminal is limited to about only 10 feet by the location of one of the main electrical transformers serving the Airport. Lastly, some "fixed," but easily moved items must be moved for expansion, including weather instruments and propane tanks for tenant vehicles.

Since one of the ARFF vehicles is currently stored outside, placing both vehicles outside during remodeling would not affect ARFF operations. Considering the space limitations

for expansion and the potential disruptions to functions at the ARFF station, the remodeling and new construction alternatives was not considered a feasible alterntive.

4.3 Demolish–New Construction at Existing Site Alternative

This alternative would demolish the existing ARFF station and build a new ARFF facility that integrates crew accommodation, equipment storage; and vehicle storage to meet the FAA Advisory Circular requirements. A complete temporary facility would have to be constructed at a nearby location to store equipment, materials, and related supplies, and to provide space for administrative functions. Although the ARFF vehicles could be parked outside without affecting operations and efficiency, there would be disruptions to the on-going functions of the ARFF station during the location in temporary spaces. In addition, this alternative would incur costs related to construction of temporary facilities and the related move into the temporary facility and eventually move into the new facility. The additional costs related to the double move and potential disruption to ARFF functions make this alterative less cost effective compared to construction at the site near the ATC tower. Based on these considerations, this alternative was not considered feasible.

5. DETERMINATION

Short-term construction impacts include disruption to the ARFF station project site and surrounding areas during construction, decline in air quality from construction activities, and increase in noise levels. Once construction has been completed, the short-term adverse impacts will no longer occur.

Based on analysis of the anticipated impacts, a Finding of No Significant Impact (FONSI) is anticipated for the ARFF station project site. The significance criteria to make this determination are set forth below and in Hawaii Administrative Rules Title 11, State of Hawaii Department of Health, Chapter 200, Environmental Impact Statement Rules.

1) *Involve an irrevocable commitment to loss or destruction of any natural or cultural resources*;

The ARFF station project site does not provide habitat for Federal or State of Hawaii listed or candidate threatened or endangered species of flora or fauna. The project site has been used for an airport since 1927. Thus, the ARFF station project site will not result in the loss or destruction of natural resources. Based on the results of the 1981 archaeological field survey for the Airport and the September 18, 2008 State Historic Preservation Division finding stating that it had made a finding that "no historic properties will be affected" as residential development/urbanization and previous grubbing/grading has altered the land, development of the ARFF station is not expected to have loss or destruction of any natural or cultural resources.

2) *Curtail the range of beneficial uses of the environment*;

The ARFF station will use lands within Molokai Airport which have been used for an airport. The ARFF station will occupy an area of 50,600 square feet (1.16 acres) which is a minor portion of Molokai Airport. Thus, the ARFF station will not curtail the beneficial uses of the environment.

3) *Conflict with the State's long-term environmental policies or goals as expressed in Chapter 344, HRS, and any revisions thereof and amendments thereto, court decisions, or executive orders*;

The ARFF station project will not involve actions or activities which would adversely affect natural resources of the project site. The ARFF station will be consistent with the guidelines of Chapter 344, HRS, as it will provide a public facility to support the critical public service functions assigned to the DOT at Molokai Airport. As such, the ARFF station will not conflict with the State's long-term environmental policies or goals as expressed in Chapter 344, HRS.

4) *Substantially affect the economic or social welfare of the community or state*;

The ARFF station will be a public facility to be used by public agencies for public purposes. The ARFF station is an integral part of the infrastructure at Molokai Airport needed to protect the health and welfare of users of the Airport and the community. The ARFF station will have not have an adverse effect to the economic or social welfare of the community.

5) *Substantially affect public health*;

An efficient aircraft fire a rescue station is needed to protect the public health of Airport users. The ARFF station will serve as the facility for the DOT to conduct its mandated public function. Thus, the ARFF station project will not have an adverse effect on public health.

6) *Involve substantial secondary impacts, such as population changes or effects on public facilities*;

The ARFF station project will be a public facility used by the DOT to support its mission related aircraft operations at Molokai Airport. Personnel assigned to daily operation of the ARFF are expected to be residents of Molokai or other parts of the state. Thus, construction of the ARFF station will not create secondary impacts, such as population changes or effects on public facilities.

7) *Involve a substantial degradation of environmental quality*;

The ARFF station is anticipated to result in short-term impacts to noise, air quality and traffic during the period of construction. The ARFF station project site does not contain Federal or State listed or candidate threatened or endangered species of flora or fauna. Further, based on the results of the 1981 archaeological field survey for the Airport and the September 18, 2008, the State Historic Preservation Division finding stating that it had made a finding that "no historic properties will be affected" as residential development/urbanization and previous grubbing/grading has altered the land.

Results from the background and community/cultural consultation research for this Cultural Impact Assessment indicate that most of the study participants agree that the proposed developments for ARFF station will not negatively impact Hawaiian beliefs, resources and practices. As a result, the ARFF station project will not result in a substantial degradation of environmental quality.

8) *Have a cumulative effect upon the environment or involves a commitment for larger actions*;

The ARFF station does not involve a commitment to further actions to other DOT projects on Molokai or in Hawaii. As a result, the ARFF station will not have a cumulative effect upon the environment or involve a commitment by the State to larger actions on Molokai.

9) Affect a rare, threatened or endangered species;

The ARFF station project site does not contain Federal or State listed or candidate threatened or endangered species of flora or fauna. However, the USFWS stated the Newell's shearwater, a species listed as threatened, and the Hawaiian petrel, a species listed as endangered, may traverse the ARFF station project site at night during the breeding season (February 1 through December 15). Further, the USFWS included discussion related to the effect of outdoor lighting on the peak fledging period (September 15 to December 15) when the seabirds could become disoriented by the exterior lights resulting in fallout injury and mortality.

Although most flights at the Molokai Airport occur during the daylight hours, aircraft activity can occur at night at which time the runway lights can be activated by approaching or departing aircraft. Thus, the ARFF station will include exterior lighting for operational and security purposes. The need to provide shielded fixtures for these exterior lights will be included in the project building and site design to mitigate potential impacts to any seabirds.

10) *Detrimentally affect air or water quality or ambient noise levels*;

Operation of construction equipment would increase noise and exhaust emission levels in the immediate vicinity of the ARFF station project site during the construction period. Once operational, the ARFF station will contribute almost no additional noise or air emissions to Molokai Airport or the local area.

11) *Affects or likely to suffer damage by being located in an environmentally sensitive area such as a floodplain, tsunami zone, beach, erosion-prone area, geographically hazardous land, estuary, fresh water or coastal water*;

According to the Flood Insurance Rate Map (FIRM) September 6, 1989, Community Panel Number 150003 0040C the ARFF station is located in Zone C, defined as area of minimal flooding. The ARFF station project site is also not within the County of Maui Special Management Area. In addition, the ARFF station project site is not within the coastal shoreline area. Thus, the ARFF station project site is not located in an environmentally sensitive area.

12) *Substantially affect scenic vistas and viewplanes identified in county or state plans or studies*;

The ARFF station is sited near the air traffic control tower north of the intersection of the two runways on Molokai Airport. Although use of the air traffic control tower access road is not restricted, the ARFF station will not affect scenic vistas and viewplanes from public roads.

13) *Require substantial energy consumption.*

The ARFF station is a public facility to be used by public agencies for public purposes. It is a new facility which will be planned and designed to minimize use of electrical power. The ARFF station includes elements which can, to the extent possible, be designed to the provisions of Chapter 196, Energy Resources, Hawaii Revised Statutes, and Section 196-9, Energy efficiency and environmental standards for state facilities, motor vehicles, and transportation fuel. Specific elements include considering installation of a solar water heating system, specifying Energy Star equipment, and incorporating recycling as a standard operating practice.

The FAA Advisory Circular does not include a requirement or discussion related to use of Leadership in Energy and Environmental Design (LEED) as it applies to design of the AFRR improvements. Notwithstanding the design requirements of the FAA Advisory Circular, the provisions of Act 96 will be considered which will include design elements that comply with the LEED Green Building Rating System. Thus the ARFF station will not create a substantial increase in energy consumption.

Based on these findings and the assessment of potential impacts from the ARFF station at the Molokai Airport project site, a Finding of No Significant Impact (FONSI) is anticipated.

6. CONSULTED PARTIES

6.1 Pre-Assessment Consultation

The following agencies were consulted during the pre-assessment phase of the Draft Environmental Assessment. Each agency was sent a copy of a project summary and a request for their written comments on the project. All written comments and responses are reproduced in Appendix A.

US Army Corps of Engineers
US Fish and Wildlife Service
State of Hawaii Department of Hawaiian Home Lands
State of Hawaii Department of Health
State of Hawaii Department of Land and Natural Resources
State of Hawaii Department of Land and Natural Resources/ Historic Preservation Division
State of Hawaii Office of Hawaiian Affairs
County of Maui Department of Environmental Management
County of Maui Fire Department
County of Maui Planning Department
County of Maui Police Department
County of Maui Department of Public Works
County of Maui Department of Transportation
County of Maui Department of Water Supply
County of Maui Molokai Planning Commission
Maui Electrical Company

6.2 Agencies and Organizations to be Consulted on the Draft EA

The following is a list of agencies and organizations that will be consulted during the preparation of the Draft Environmental Assessment. Copies of the comments substantive comments received and responses will be included in the Final Environmental Assessment.

<u>Federal</u>
Department of the Army, US Army Engineer District, Honolulu
US Department of the Interior of the Fish and Wildlife Service

State Agencies

Department of Agriculture
Department of Business, Economic Development and Tourism
DBED&T - State Energy Office
Department of Defense
Department of Hawaiian Home Lands
Department of Health
Department of Health - Environmental Management Division
Department of Land and Natural Resources
Department of Land and Natural Resources Historic Preservation Division
Department of Land and Natural Resources - Water Resource Management
Office of Hawaiian Affairs
University of Hawaii Water Resources Research Center
University of Hawaii Environmental Center
Molokai Public Library
Office of Environmental Quality Control

County of Maui Agencies

County of Maui Department of Fire and Public Safety
County of Maui Department of Parks and Recreation
County of Maui Planning Department
County of Maui Police Department
County of Maui Department of Public Works
County of Maui Department of Environmental Management
County of Maui Department of Water Supply
County of Maui Department of Transportation
County of Maui Molokai Planning Commission

Officials

Senator J. Kalani English, 6th District
Representative Mele Carroll, 13th District
Councilmember Danny A. Mateo

Public Utilities

Maui Electric Company

Verizon Hawaii

Oceanic Time Warner Cable

Organizations

Maui Economic Opportunity Inc., Molokai Branch

7. REFERENCES

County of Maui. Molokai Community Plan. January 1984.

County of Maui. Ordinance 302, Bill No. 106 (2001). Ordinance Amending Section 2.80A.050 Maui County Code, Pertaining to the Adoption of the Updated Molokai Community Plan (2001). Effective Date: December 19, 2001.

Federal Emergency Management Flood Insurance Rate Map Community Panel Number 150003 0040C for Molokai. September 6, 1989 (Revised)

State of Hawaii Department of Agriculture. Agricultural Lands of Importance to the State of Hawaii, Island of Molokai. January 1977.

State of Hawaii Department of Transportation Airports Division. Molokai Airport Master Plan Final Report. May 1999.

State of Hawaii Department of Transportation Airports Division. Environmental Assessment for Molokai Airport Improvements State Project No. S-1031. 1981.

State of Hawaii Department of Transportation Airports Division. Molokai Airport Master Plan Phase I Improvements Final Environmental Assessment. May 1999 (Withdrawn on July 23, 1999)

State of Hawaii Department of Transportation Highways Division. Islands of Maui and Molokai. Traffic Survey Data (Individual Stations) Molokai Stations 1 to 13. 2001.

State of Hawaii Department of Transportation Highways Division, Maui District. Final Environmental Assessment Molokai Baseyard, Molokai Industrial Park, Palaau, Molokai. February 2000.

State of Hawaii Department of Hawaiian Home Lands. Final Environmental Assessment Molokai Water System Improvements Phases 3B and 3C, Hoolehua Molokai. April 1993.

State of Hawaii Department of Accounting and General Services. Final Environmental Assessment Anuenue (formerly Rainbow) Radio Facilities and Towers Statewide Puu Nana Site, Kaluakoi District, Island of Molokai, Hawaii. August 2004.

State of Hawaii Land Evaluation and Site Assessment Commission. *A Report of the State of Hawaii Land Evaluation and Site Assessment System.* February 1986.

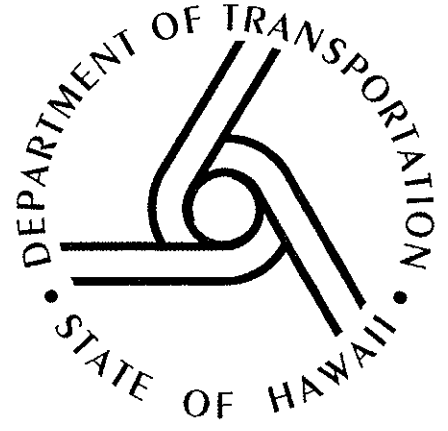
The Hawaii State Plan Chapter226,Hawaii Revised Statutes . Office of the Governor Office of State Planning. !988.

Title 11 Hawaii Administrative Rules State of Hawaii Department of Health Chapter 46 Community Noise Control. September 23, 1996.

US Department of Agriculture Soil Conservation Service. *Soil Survey of Islands of Kauai, Oahu, Maui, Molokai, and Lanai, State of Hawaii.* Issued August 1972.

US Department of Transportation Federal Aviation Administration FAA. Advisory Circular (AC) 150/5210-15A, Airport Rescue and Fire Fighting Station Building Design,. September 10, 2008.

US Department of Transportation Federal Aviation Administration Federal Air Regulations Part 139.



APPENDIX A

7526-01
9/26/08

United States Department of the Interior

FISH AND WILDLIFE SERVICE
Pacific Islands Fish and Wildlife Office
300 Ala Moana Boulevard, Room 3-122, Box 50088
Honolulu, Hawaii 96850

TAKE PRIDE IN AMERICA

cc: AP1, em

In Reply Refer To:
2008-TA-0336

SEP 2 2 2008

JS

Mr. John L. Sakaguchi
Senior Planner
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

RECEIVED
SEP 2 3 2008
WILSON OKAMOTO CORPORATION

Subject: Technical Assistance for the Proposed Relocation and Improvement of Airport Rescue and Firefighting Station, Molokai Airport, Hoolehua, Molokai

Dear Mr. Sakaguchi:

Thank you for your September 11, 2008, letter indicating that you are compiling information that will be incorporated into environmental review documents for the proposed relocation and improvement of the aircraft rescue and firefighting station at Molokai Airport in Hoolehua, Molokai. We received your letter on September 15, 2008. Based on the project information you provided and pertinent information in our files, the threatened Newell's shearwater (*Puffinus auricularis newelli*) and endangered Hawaiian petrel (*Pterodroma phaeopygia sandwichensis*) (collectively referred to as seabirds) may traverse the project area at night during the breeding season (February 1 through December 15).

Any outdoor lighting, particularly when used during each year's peak fledging period (September 15 through December 15), could result in seabird disorientation, fallout, and injury or mortality. Potential impacts to seabirds can be minimized by shielding outdoor lights associated with the project, avoiding night-time construction, installing motion detectors and timers on all light fixtures, and providing all project staff with information regarding seabird fallout. All project lights should be shielded so the bulb can be seen only from below.

If the above measures can not be incorporated into the project design, then a seabird response plan may be needed. Such a plan should include:

- Measures to be taken in the event that a bird is seen circling a light, which may include temporarily turning the light off.
- Efforts to actively search for downed birds in lighted areas during the peak fledging season (September 15 through December 15).
- Maintenance of a pet carrier on site at all times with instructions on how and where to take recovered birds.
- A list of qualified bird rescue contacts such as local veterinarians, rehabilitation centers, or Hawaii Division of Forestry and Wildlife (DOFAW) representatives.

- A log of all seabird incidents that is submitted to the U.S. Fish and Wildlife Service and DOFAW within 48 hours of the discovery.
- Documented seabird awareness training and annual refresher training for staff.

Thank you for your efforts to conserve endangered species. If you have questions or would like additional information, please contact Consultation and Technical Assistance Program Fish and Wildlife Biologist Dawn Greenlee (phone: 808-792-9400; fax: 808-792-9581).

Sincerely,

Chris Russell

for Patrick Leonard
Field Supervisor

WILSON OKAMOTO CORPORATION
1907 South Beretania Street
Mauka Plaza, Suite 400
Honolulu, Hawaii 96826-1584
Phone: 808.946.2277
Fax: 808.946.2253
www.wilsonokamoto.com

7526-01
November 10, 2008

Mr. Patrick Leonard, Field Supervisor
Pacific Islands Office
Fish and Wildlife Service
U.S. Department of the Interior
300 Ala Moana Boulevard, Room 3-122
Honolulu, Hawaii 96813

Attention:: Ms. Dawn Greenlee, Wildlife Biologist

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Molokai Airport Aircraft Rescue and Firefighting Station Improvements
(AM 2031-14); Hoolehua- Palauu, Molokai, Hawaii,
TMK: 5-02-004:008; 082; 083
Response to Comment

Dear Mr. Leonard:

Thank you for your September 22, 2008 response letter (2008-TA-0336) on the Draft Environmental Assessment (EA), Pre-Assessment Consultation for the Molokai Airport Aircraft Rescue and Firefighting Station Improvements (AM 2031-14) project.

The Draft EA will include discussion related to the threatened Newell's shearwater and endangered Hawaiian petrel that may traverse the project site at night during the breeding season (February 1 through December 15). Further, the Draft EA will include discussion related to the effect of outdoor lighting on the peak fledging period (September 15 to December 15) when the seabirds could become disoriented by the exterior lights resulting in fallout injury and mortality.

The Draft EA will also indicate, although most flights at the Molokai Airport occur during the daylight hours, aircraft activity can occur at night at which time the runway lights can be activated by approaching or departing aircraft. Thus, the Aircraft Rescue and Firefighting Station will include exterior lighting for operational and security purposes. The need to provide shielded fixtures for these exterior lights will be included in the project building and site design to mitigate potential impacts to any seabirds.

Given the measures to shield exterior lights as part of the project site design, as stated in your letter, a seabird response plan will not be needed as part of the Station's operational requirements.

We appreciate your participation in the Draft EA process. If you have any questions, please call me at 808.946.2277 or fax to 808.946.2253.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Johnson; DOT-A
C. Nishio, API

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LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

7526-01
9/24/08
BG
JS

cc: Mr. Jen

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES
LAND DIVISION

POST OFFICE BOX 621
HONOLULU, HAWAII 96809

September 19, 2008

Wilson Okamoto Corporation
1907 South Beretania Street Suite 400
Honolulu, Hawaii 96826

RECEIVED
SEP 23 2008
WILSON OKAMOTO CORPORATION

Attention: Mr. John Sakaguchi

Gentlemen:

Subject: Pre-Assessment Consultation for Draft Environmental Assessment for Molokai Airport Aircraft Rescue and Firefighting Station Improvements

Thank you for the opportunity to review and comment on the subject matter. The Department of Land and Natural Resources' (DLNR) has no other comments to offer on the subject matter. Should you have any questions, please feel free to call our office at 587-0433. Thank you.

Sincerely,

Morris M. Atta
Administrator

1907 South Beretania Street
Aviation Plaza, Suite 400
Honolulu, Hawaii, 96826-1564
Phone: 808.946.2277
Fax: 808.946.2253
www.wilsonokamoto.com

7526-01
November 10, 2008

Ms. Laura Thielen, Chairperson
Department of Land and Natural Resources
State of Hawaii
1151 Punchbowl Street, Room 220
Honolulu, Hawaii 96813

Attention: Morris M. Atta, Administrator, Land Division

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Molokai Airport Aircraft Rescue and Firefighting Station Improvements
(AM 2031-14); Hoolehua- Palauu, Molokai, Hawaii,
TMK: 5-02-004:008; 082; 083
Response to Comment

Dear Ms. Thielen:

Thank you for your September 19, 2008 response letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation for the Molokai Airport Aircraft Rescue and Firefighting Station Improvements (AM 2031-14) project. The Draft EA will note the Department of Land and Natural Resources had no comments on the project.

We appreciate your participation in the Draft EA process. If you have any questions, please call me at 808.946.2277 or fax to 808.946.2253.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Johnson, DOT-A
C. Nishio, API

LINDA LINGLE
GOVERNOR
STATE OF HAWAI'I

7526-01 JS

10/17/08

MICAH A. KANE
CHAIRMAN
HAWAIIAN HOMES COMMISSION

KAULANA H. PARK
DEPUTY TO THE CHAIRMAN

ROBERT J. HALL
EXECUTIVE ASSISTANT

cc: API/cm

STATE OF HAWAI'I
DEPARTMENT OF HAWAIIAN HOME LANDS
P.O. BOX 1879
HONOLULU, HAWAI'I 96805

October 8, 2008

Mr. John L. Sakaguchi, AICP
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Sakaguchi:

Thank you for the opportunity to participate in the consultation process in preparation of a draft environmental assessment report for the proposed improvements to the existing Airport Aircraft Rescue and Firefighting Station located at Molokai Airport. The Department of Hawaiian Home Lands has no comments to offer.

Should you have any questions, please call the Planning Office at (808) 620-9480.

Aloha and mahalo,

Micah A. Kane, Chairman
Hawaiian Homes Commission

WILSON OKAMOTO CORPORATION

1907 South Beretania Street
Artesian Plaza, Suite 400
Honolulu, Hawaii 96826 USA
Phone: 808.946.2277
Fax: 808.946.2253
www.wilsonokamoto.com

7526-01
November 10, 2008

Mr. Micah Kane, Chairman
Hawaiian Home Commission
Department of Hawaiian Home Lands
State of Hawaii
P.O. Box 1879
Honolulu, Hawaii 96805

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Molokai Airport Aircraft Rescue and Firefighting Station Improvements
(AM 2031-14); Hoolehua- Palauu, Molokai, Hawaii,
TMK: 5-02-004:008; 082; 083
Response to Comment

Dear Mr. Kane:

Thank you for your October 8, 2008 response letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation, Molokai Airport Aircraft Rescue and Firefighting Station Improvements (AM 2031-14) project. The Draft EA will note the Department of Hawaiian Homelands had no comment s on the project.

We appreciate your participation in the Draft EA process. If you have any questions, please call me at 808.946.2277 or fax to 808.946.2253.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Johnson , DOT-A
C. Nishio, API

LINDA LINGLE
GOVERNOR OF HAWAII

7526-01
9/24/08
BG
FILE

LAURA E. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

cc: API) em

September 18, 2008

RECEIVED
SEP 22 2008
WILSON OKAMOTO CORPORATION

LOG NO: 2008.4225
DOC NO: 0809NM20
Archaeology

John Sakaguchi
Wilson Okamoto Corp
1907 South Beretania Street, Suite 400
Honolulu, Hawai'i 96826

Dear Mr. Sakaguchi:

JS

SUBJECT: **Chapter 6E-8 Historic Preservation Review [State/Molokai Airport] – DEA Molokai Airport Rescue and Firefighting Improvements Hoolehua, Island of Moloka'i**
TMK: (2) 5-2-004: 08, 82, 83

The aforementioned permit is for improvements to the existing disturbed area of the Molokai Airport Rescue and Firefighting Station.

We believe that "**no historic properties will be affected**," because:
- ☐ Intensive cultivation has altered the land
- ☒ Residential development/urbanization has altered the land
- ☒ Previous grubbing/grading has altered the land
- ☐ An accepted archaeological inventory survey (AIS) found no historic properties
- ☐ SHPD previously reviewed this project and mitigation has been completed
- ☐ Other:

In the event that historic resources, including human skeletal remains, are identified during routine construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance, and the State Historic Preservation Division, needs to be contacted immediately at (808) 692-8015.

If you have any questions, please call me, at 652-1510.

Aloha,

Nancy A. McMahon

Nancy McMahon, Deputy SHPO/State Archaeologist
Historic Preservation Manager/Deputy Administrator
State Historic Preservation Division

1907 South Beretania Street
Aliiolani Plaza Suite 400
Honolulu, Hawaii, 96826 USA
Phone 808 946 2277
Fax 808 946 2253
www.wilsonokamoto.com

7526-01
November 10, 2008

Ms. Nancy McMahon, Archaeology and Historic Preservation Manager
State Historic Preservation Division
Department of Land and Natural Resources
State of Hawaii
601 Kamokila Boulevard, Room 555
Kapoei, Hawaii 96707

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Molokai Airport Aircraft Rescue and Firefighting Station Improvements
(AM 2031-14); Hoolehua- Palauu, Molokai, Hawaii,
TMK: 5-02-004:008; 082; 083
Response to Comment

Dear Ms. McMahon:

Thank you for your September 18, 2008 comment letter (LOG No. 2008.4225, DOC NO 0890NM20) on the Draft Environmental Assessment (EA), Pre-Assessment Consultation for the Molokai Airport Aircraft Rescue and Firefighting Station Improvements (AM 2031-14) project.

The Draft EA will note the State Historic Preservation Division has made a finding that "no historic properties will be affected" because residential development/urbanization and previous grubbing/grading has altered the land. The Draft EA and construction documents will state: in the event that historic resources, including human skeletal remains are identified during construction activities, all work needs to cease in the immediate vicinity of the find, the find needs to be protected from additional disturbance and the State Historic Preservation Division needs to be contacted immediately at (808) 692.8015."

We appreciate your participation in the Draft EA process. If you have any questions, please call me at 808.946.2277 or fax to 808.946.2253.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Johnson, DOT-A
C. Nishio, API

PHONE (808) 594-1888

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

FAX (808) 594-1865

7526-01

10/

cc: API }em

HRD08/3192

October 15, 2008

RECEIVED
OCT 20 2008
WILSON OKAMOTO CORPORATION

John Sakaguchi
Wilson Okamoto Corporation
1907 South Beretania St., Suite 400
Honolulu, Hawai'i 96826

RE: Request for comments on the pre-assessment consultation for the Moloka'i Airport Aircraft Rescue and Firefighting Station Improvements, Moloka'i, TMKs: 5-2-4:8, 82, and 83.

Aloha e John Sakaguchi.

The Office of Hawaiian Affairs (OHA) is in receipt of the above-mentioned letter dated September 11, 2008. OHA has reviewed the project and offers the following comments.

OHA is supportive of the proposal to upgrade the facilities for the Aircraft Rescue Firefighting station to provide needed operational space and to promote personnel safety. Keeping in mind that this is a pre-assessment and that a draft environmental review is forthcoming, we do note that the project site has been previously cleared. We are concerned that a segment of this project has already been completed before an environmental review was produced.

We do have the following general recommendations to help form a better finished project. OHA would like to point out that Hawai'i is re-inventing its energy portfolio. As such, the applicant should consider that by 2020, 20% of Hawai'i's electricity is to be from renewable sources. Further, on January 28, 2008, Assistant Secretary of the Department of Energy and Governor Linda Lingle signed a groundbreaking Memorandum of Understanding (MOU) between the state government and the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy. The MOU estimates that Hawai'i can potentially meet between 60 and 70 percent of its future energy needs from clean, renewable energy sources.

As such, the legislature has recommended applicants consider the Leadership in Energy and Environmental Design (LEED) Green Building Rating System, which is the nationally accepted benchmark for the design, construction, and operation of high performance green buildings. Further, OHA asks if the applicant has considered compliance with Act 96 enacted by the Legislature of the State of Hawai'i (2006). The purpose of this Act is to provide one segment of a larger comprehensive approach to achieving energy self-sufficiency for the state by incorporating green building practices and installing renewable energy resources while using environmentally preferable products.

Additionally, as this is a state facility, OHA sees that Hawaii Revised Statutes §196-9 *Energy efficiency and environmental standards for state facilities, motor vehicles, and transportation fuel* should apply. OHA notes that the applicant should implement, to the extent possible, the goals of §196-9 during planning and budget preparation and program implementation of this facility.

We also ask that the project area be landscaped with drought tolerant native or indigenous species that are common to the area. Any invasive species should also be removed. Doing so would not only serve as practical water-saving landscaping practices, but also serve to further the traditional Hawaiian concept of mālama 'āina and create a more Hawaiian sense of place. This would also help to reduce the amount of impervious surfaces in the project area, thereby reducing runoff as well. Tree and landscape planting to shade paved parking areas and provide shade and cooling to building elements and outdoor use areas should also be considered.

Thank you for the opportunity to comment. We look forward to the review of the draft environmental assessment. If you have further questions, please contact Grant Arnold by phone at (808) 594-0263 or e-mail him at granta@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Administrator

C: OHA CRC Moloka'i

WILSON OKAMOTO CORPORATION

907 Fort Street Mall, Suite 400
Honolulu, Hawaii 96813
Phone: 808.946.2277
Fax: 808.946.2253
www.wilsonokamoto.com

7526-01
November 10, 2008

Mr. Clyde Nāmu'o, Director
State of Hawaii
Office of Hawaiian Affairs
711 Kapiolani Blvd. Suite 500
Honolulu, Hawaii 96813

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Molokai Airport Aircraft Rescue and Firefighting Station Improvements
(AM 2031-14); Hoolehua- Palauu, Molokai, Hawaii,
TMK: 5-02-004:008; 082; 083
Response to Comment

Dear Mr. Nāmu'o:

Thank you for your October 15, 2008 response letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation for the Molokai Airport Aircraft Rescue and Firefighting Station Improvements (AM 2031-14) project. Our response follow:

The Draft EA will note the project site for the Airport Aircraft Rescue and Firefighting (ARFF) station is located near the intersection of the Airport's two runways. As such, the project site was probably cleared and graded as part of the initial development of the Airport, which occurred starting 1927. The Draft EA will state the project site was not cleared and graded as part of the work for the ARFF station.

The ARFF station will use funds provided by Federal Aviation Administration (FAA) for design and funds provided by the State of Hawaii for its construction. As such, the replacement ARFF is required to be in compliance with the State's Grant Assurance to have an ARFF station that complies with standards set forth in FAA Advisory Circular (AC) 150/5210-15A, September 10, 2008. The AC sets forth the policy for Federally funded fire stations that met the Federal Aviation Regulations, Title 14 Code of Federal Regulations Part 139, Certification of Airports. Molokai Airport operates with a Part 139 certificate.

AC 150/5210-15A does not include a requirement or discussion related to use of Leadership in Energy and Environmental Design (LEED) as it applies to design of the ARFF improvements. Notwithstanding the design requirements of AC 150/5210-15A, the provisions of Act 96 will be considered which will include design elements that comply with the LEED Green Building Rating System.

The replacement ARFF station includes elements which can, to the extent possible, be designed to the provisions of Chapter 196, Energy Resources, Hawaii Revised Statutes, and Section 196-9, Energy efficiency and environmental standards for state facilities, motor vehicles, and transportation fuel. Specific elements include considering installation of a solar water heating system, specifying Energy Star equipment, and incorporating recycling as a standard operating practice.

The Draft EA will note the portions of the ARFF station which include landscaping such the employee parking area, adjacent walkway, and surrounding building landscaping can incorporate drought tolerant native or indigenous species.

The Draft EA will also note one of the primary design considerations for the ARFF is the operational objective to provide timely response, protect life and property, and minimize the effects of an aircraft accident, incidents, or catastrophic event occurring on airport property. The design of the ARFF must meet this objective along the guidelines set forth in AC 150/5210-15A.

We appreciate your participation in the Draft EA process. If you have any questions, please call me at 808.946.2277 or fax to 808.946.2253.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Johnson, DOTA
C. Nishio, API

CHARMAINE TAVARES
Mayor

MILTON M. ARAKAWA, A.I.C.P.
Director

MICHAEL M. MIYAMOTO
Deputy Director

Telephone: (808) 270-7845
Fax: (808) 270-7955

COUNTY OF MAUI
DEPARTMENT OF PUBLIC WORKS
200 SOUTH HIGH STREET, ROOM NO. 434
WAILUKU, MAUI, HAWAII 96793

September 30, 2008

(7526-01) JS

RALPH NAGAMINE, L.S., P.E.
Development Services Administration

CARY YAMASHITA, P.E.
Engineering Division

BRIAN HASHIRO, P.E.
Highways Division

10/7/08

cc: API em

RECEIVED
OCT 06 2008
WILSON OKAMOTO CORPORATION

Mr. John L. Sakaguchi, A.I.C.P., Senior Planner
WILSON OKAMOTO CORPORATION
1907 South Beretania Street
Artesian Plaza, Suite 400
Honolulu, Hawaii 96826

Dear Mr. Sakaguchi:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT, PRE-ASSESSMENT CONSULTATION FOR MOLOKAI AIRPORT AIRCRAFT RESCUE AND FIREFIGHTING STATION IMPROVEMENTS; TMK: (2) 5-2-004:008, 082, 083

We reviewed the subject application and have the following comments:

1. Our comment is regarding the Molokai Airport access roads, Keonelele Avenue and Hauakea Avenue. At most other airports, the airport access road(s) are maintained by the State Airports Division. However, on Molokai, the airport access roads have been relegated to being maintained by the County of Maui. Please discuss why this is so.

Please call Michael Miyamoto at (808) 270-7845 if you have any questions regarding this letter.

Sincerely,

MILTON M. ARAKAWA, A.I.C.P.
Director of Public Works

MMA:MMM:ls
xc: Highways Division
Engineering Division
S:\LUCA\CZM\52004008_008_082_083_Molokai_AP_rescue_fire_dea_ls.wpd

WILSON OKAMOTO CORPORATION
1907 South Beretania Street
Artesian Plaza, Suite 400
Honolulu, Hawaii 96826 USA
Phone: 808 946 2277
Fax: 808 946 2253
www.wilsonokamoto.com

7526-01
November 10, 2008

Mr. Milton Arakawa, AICP, Director
Department of Public Works
County of Maui
200 South High Street
Wailuku, Hawaii 96793

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Molokai Airport Aircraft Rescue and Firefighting Station Improvements
(AM 2031-14); Hoolehua- Palauu, Molokai, Hawaii,
TMK: 5-02-004:008; 082; 083
Response to Comment

Dear Mr. Arakawa:

Thank you for your September 30, 2008 response letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation, Molokai Airport Aircraft Rescue and Firefighting Station Improvements (AM 2031-14) project. The Draft EA will state the property boundary map shows Keonelele Avenue and Hauakea Avenue are located outside the Molokai Airport property. As such, these roads should be considered County roads and maintained by the County. At most airports, the Department of Transportation (DOT) maintains roads within the boundaries of the airport.

We appreciate your participation in the Draft EA process. If you have any questions, please call me at 808.946.2277 or fax to 808.946.2253.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Johnson, DOT-A
C. Nishio, API

CHARMAINE TAVARES
Mayor

JEFFREY S. HUNT
Director

KATHLEEN ROSS AOKI
Deputy Director

COUNTY OF MAUI
DEPARTMENT OF PLANNING

7526-01
10/15/08
CC: API, em

October 13, 2008

Mr. John L. Sakaguchi, AICP
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

RECEIVED
OCT 15 2008
WILSON OKAMOTO CORPORATION

Dear Mr. Sakaguchi:

SUBJECT: DRAFT ENVIRONMENTAL ASSESSMENT, PRE-ASSESSMENT CONSULTATION, MOLOKAI AIRPORT AIRCRAFT RESCUE AND FIREFIGHTING STATION IMPROVEMENTS (AM 2031-14), HOOLEHUA-PALA'AU, MOLOKAI, HAWAII, TMK: 5-2-004:008, 082, 083 (RFC 2008/0098)

Thank you for the opportunity to provide comments in response to your letter dated September 11, 2008, requesting preliminary comments for preparation of a Draft EA on the above-listed project. This request was also made of the Molokai Planning Commission, and was heard by them at their meeting on October 8, 2008. While the Commission was not able to take action on their own comments as a body at that time, the Staff Planner was in attendance and did note down their concerns and comments, which have been taken under consideration in preparation of this response from the Department of Planning (Department). The Department offers the following preliminary comments:

1. Please provide discussion of long range and strategic transportation plans for the Molokai Airport, including any pertinent alternative sites analyses and past discussions of or plans to relocate the airport to the Pala'au area;

2. Please provide discussion of the purpose of building the temporary structure just recently completed for the Airport Rescue and Firefighting personnel;

3. Please provide a better Project Site Map at a closer scale – the one provided is better defined as a Project Location Map;

4. Please provide discussion of the purpose of providing overnight sleeping accommodations for personnel, and whether or not that will promote the hiring of qualified Molokai residents. Provide information on how many personnel will be accommodated at any one time in the facility;

250 SOUTH HIGH STREET, WAILUKU, MAUI, HAWAII 96793
MAIN LINE (808) 270-7735; FACSIMILE (808) 270-7634
CURRENT DIVISION (808) 270-8205; LONG RANGE DIVISION (808) 270-7214; ZONING DIVISION (808) 270-7253

5. Discuss how the various features of the facility, such as fitness rooms, lockers and showers relate to readiness and the provision of rescue and fire safety services;

6. Discuss whether the new facility will have to be compliant with ADA requirements or exempted, and why;

7. Discuss anticipated impacts and mitigation measures for airport traffic flow;

8. Discuss anticipated impacts and mitigation measures for construction-related activities;

9. Discuss whether this project is or is not part of a larger development;

10. Discuss how this project does or does not conform to the goals, objectives, policies and implementing actions of the Molokai Community Plan.

Thank you for this opportunity to provide our preliminary comments. Please feel free to contact Staff Planner Nancy McPherson via email at nancy.mcpherson@mauicounty.gov or by phone at (808) 646-0406, should further clarification be necessary.

Sincerely,

for CLAYTON I. YOSHIDA, AICP
Planning Program Administrator

For: JEFFREY S. HUNT, AICP
Planning Director

xc: Kathleen R. Aoki, Deputy Director
Clayton I. Yoshida, Planning Program Administrator
Nancy M. McPherson, Staff Planner, Molokai
Project File
General File

JSH:NMM:bv
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7526-01
November 10, 2008

Mr. Jeffrey Hunt, Director
Planning Deaprtment
County of Maui
250 South High Street
Wailuku, Hawaii 96793

Attention: Ms. Nancy McPherson, Staff Planner

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Molokai Airport Aircraft Rescue and Firefighting Station Improvements
(AM 2031-14); Hoolehua- Palauu, Molokai, Hawaii,
TMK: 5-02-004:008; 082; 083
Response to Comment1

Dear Mr. Hunt:

Thank you for your October 13, 2008 response letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation for the Molokai Airport Aircraft Rescue and Firefighting Station Improvements (AM 2031-14) project. Our response follow:

1. The Draft EA will provide background information regarding Molokai Airport and its current location. However, as set forth in the Project Summary sheet, the project is to improve the aircraft firefighting facilities, and not to identify an alternative site for Molokai Airport.

2. As stated in the Project Summary sheet, Molokai Airport operates under various Federal Air Regulations (FAR) and must also meet Federal Aviation Administration (FAA) guidelines related to the adequacy of facilities, including firefighting stations. The existing firefighting station is sub-standard for a number of reasons, including the lack of dormitory spaces. The temporary facility adjacent to the existing station will serve as a dormitory until the replacement facility is constructed. The temporary facility will be removed when the replacement facility has been completed.

3. The Draft EA will include additional maps and drawing including a topographic survey map, site plan, floor plan, and building elevation.

4. The Draft EA will indicate, although most flights at the Molokai Airport occur during the daylight hours, aircraft activity can occur at night at which time the runway lights can be activated by approaching or departing aircraft. Thus, there is a need for personnel to be at the station at all times. The number of authorized personnel will be provided in the Draft EA.

1507 South Beretania Street
Artes on Plaza, Suite 400
Honolulu, Hawaii, 96826 USA
Phone: 808 946 2277
Fax: 808 946 2253
www.wilsonokamoto.com

4. The Draft EA will indicate, although most flights at the Molokai Airport occur during the daylight hours, aircraft activity can occur at night at which time the runway lights can be activated by approaching or departing aircraft. Thus, there is a need for personnel to be at the station at all times. The number of authorized personnel will be provided in the Draft EA.

5. The Draft EA will state the replacement station will be designed to meet the standards outlined in FAA Advisory Circular 150/5210-15, Airport Rescue and Firefighting Station Building Design, dated July 30, 1987. The Advisory Circular set forth guidelines for the design of the ARFF and the spaces and functions to be included an ARFF station.

6. The Draft EA will state the facility will comply with the requirements of the Americans with Disability Act (ADA).

The Draft EA will be prepared to meet the requirements of Chapter 343, Hawaii Revised Statutes, as amended, and Hawaii Administrative Rules Title 11, State of Hawaii Department of Health, Chapter 200, Environmental Impact Statement Rules as such the document will include:

7. Discussion related to vehicle traffic.

8. Discussion of impacts related construction of the facility.

9. Discussion of as to whether the project is part of a larger development.

10. A discussion of Federal, State, and county plans, policies, and goals, including the Molokai Community Plan.

If you have any questions, please call me at 808.946.2277 or fax to 808.946.2253.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Johnson, DOT-A
C. Nishio, API

CHARMAINE TAVARES
Mayor
CHERYL K. OKUMA, Esq.
Director
GREGG KRESGE
Deputy Director

TRACY TAKAMINE, P.E.
Solid Waste Division
DAVID TAYLOR, P.E.
Wastewater Reclamation Division

7526-01
10/23/08

cc: [illegible]

COUNTY OF MAUI
DEPARTMENT OF
ENVIRONMENTAL MANAGEMENT
2200 MAIN STREET, SUITE 100
WAILUKU, MAUI, HAWAII 96793

October 20, 2008

[illegible]

Mr. John Sakaguchi
Senior Planner
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826

SUBJECT: MOLOKAI AIRPORT AIRCRAFT RESCUE AND FIREFIGHTING STATION IMPROVEMENTS TMK (2) 5-2-004:008, 082, AND 083, MOLOKAI

Dear Mr. Sakaguchi,

We reviewed the subject project as a pre-application consultation and have the following comments:

1. Solid Waste Division comments:
   a. None.
2. Wastewater Reclamation Division (WWRD) comments:
   a. None. No County sewer in the area of the subject project.

If you have any questions regarding this memorandum, please contact Gregg Kresge at 270-8230.

Sincerely,

Cheryl Okuma, Director

WILSON OKAMOTO
1907 South Beretania Street
Aotesha Plaza, Suite 400
Honolulu, HI 96826-1584
Phone: 808.946.2277
Fax: 808.946.2253
www.wilsonokamoto.com

7526-01
November 10, 2008

Ms. Cheryl Okuma, Director
Department of Environmental Management
County of Maui
200 South High Street
Wailuku, Hawaii 96793

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Molokai Airport Aircraft Rescue and Firefighting Station Improvements
(AM 2031-14); Hoolehua- Palauu, Molokai, Hawaii,
TMK: 5-02-004:008; 082; 083
Response to Comment

Dear Ms. Okuma:

Thank you for your October 20, 2008 response letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation for the Molokai Airport Aircraft Rescue and Firefighting Station Improvements (AM 2031-14) project. The Draft EA will note solid waste disposal for the Aircraft Rescue and Firefighting (ARFF) station will continue to follow current disposal practices and procedures as the existing station.

The Draft EA will include discussion of the wastewater collection, treatment, and disposal system for the replacement ARFF station.

We appreciate your participation in the Draft EA process. If you have any questions, please call me at 808.946.2277 or fax to 808.946.2253.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Johnson, DOT-A
C. Nishio, API

7526-01

10/1/08

cc: AM/pm

September 30, 2008

Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Hawaii 96826
Attn: John I. Sakaguchi, AICP, Senior Planner

RECEIVED
OCT 01 2008
WILSON OKAMOTO CORPORATION

Dear Mr. Sakaguchi,

On September 29, 2008, I met with Carl Brito, Supervisor for the Department of Transportation, Airport Division, relative to your letter addressed to Chief Phillips on September 11, 2008.

Mr. Brito briefed me on the proposed project at the airport property. Following our meeting, I went out to obtain a visual of the area in question to see if there would be any potential concerns during the construction process.

Taking into consideration the following areas, dust, noise, health, safety and other related issues, I found that the nearest residence is located approximately .2mi north of the airport along Airport Loop. Any complaints we receive from the residents, we would communicate them to the site supervisor for corrective action.

Most recently, Goodfellow Brothers Ltd. worked on the runaway during the night hours, and according to Mr. Brito, none of the nearby neighbors registered any kind of noise complaint.

The one concern that I am curious about is the transporting of material to the construction site and if it would have any impact on the public motorist which would require our assistance.

Please feel free to forward any questions or concerns to our District Office at P.O. Box 956, Kaunakakai, HI 96748, or you can call either Acting Captain Timothy Gapero or myself at 808-553-5355.

Sincerely,

Eugene SANTIAGO,
Acting Lieutenant, Maui Police Department
District V/Molokai

WILSON OKAMOTO CORPORATION
1907 South Beretania Street
Honolulu, Hawaii 96826-1284
Phone: 808 946 2277
Fax: 808 946 2253

7526-01
November 10, 2008

Acting Lieutenant Eugene Santiago
Police Department, District V/Molokai
County of Maui
P.O. Box 956
Kaunakakai, Molokai, Hawaii 96748

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Molokai Airport Aircraft Rescue and Firefighting Station Improvements
(AM 2031-14): Hoolehua- Palauu, Molokai, Hawaii,
TMK: 5-02-004:008; 082; 083
Response to Comment

Dear Lieutenant Santiago:

Thank you for your September 30, 2008 response letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation, Molokai Airport Aircraft Rescue and Firefighting Station Improvements (AM 2031-14) project. Our responses follow:

The Draft EA will include a discussion of dust, noise, health, safety, and other related issues. Please note, the discussion will reference contract specifications related to the construction of the Molokai Airport Aircraft Rescue and Firefighting Station Improvements. The Draft EA will state construction activities must comply with provisions of Chapter 11-60.1, Hawaii Administrative Rules (DOH), "Air Pollution Control" and, with respect to fugitive dust, Section 11-60.1-33.

The Draft EA will also include a discussion of noise including reference to Title 11 Hawaii Administrative Rule State of Hawaii Department of Health Chapter 46, Community Noise Control which identifies maximum permissible sound levels for classes of zoning districts classes established by the counties. The County of Maui zoning is "Interim" for the Airport and the State Land Use Commission designation is Agriculture. Since "Interim" is not defined in Chapter 46, the State Land Use designation will need to be used for the Airport and the project site. According to Chapter 46, the maximum permissible sound level at any point at or beyond the property line is 70 dBA for zoning district Class C, areas equivalent to lands zoned agriculture. The closest residence to the project site, which might be affected by construction activities, is about 1000 ft away.

Transportation of materials to the project site will be done on public roads. If the materials or equipment are oversize, permits for their transport will be required from the State

Department of Transportation (DOT) Highways Division to ensure loads do not exceed restrictions which might apply to a roadway or bridge and to provide proper transport of the material.

At the time of the permit, the DOT will determine the need for any marking of the loads or escort. However, please note, at this time, it is not expected that a DOT permit will be required to transport materials or equipment used for construction of the Station.

We appreciate your participation in the Draft EA process. If you have any questions, please call me at 808.946.2277 or fax to 808.946.2253.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Johnson, DOTA
C. Nishio, API

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Maui Electric Company, Ltd. • 210 West Kamehameha Avenue • PO Box 398 • Kahului, Maui, HI 96733-6898 • (808) 871-8461

7526-01
9/24/08
RG
FILE
cc: API)EM

September 16, 2008

Mr. John L. Sakaguchi, AICP, Senior Planner
Wilson Okamoto Corporation
1907 South Beretania Street, Suite 400
Honolulu, Oahu, Hawaii, 96826

RECEIVED
SEP 17 2008
WILSON OKAMOTO CORPORATION

Dear Mr. Sakaguchi,

Subject: Molokai Airport Aircraft Rescue and Firefighting Station Improvements
Draft Environmental Assessment
(AM 2031-14)
Hoolehua-Palauu, Molokai, Hawaii
Tax Map Key: 5-02-004:008; 082; 083

Thank you for allowing us to comment on the Draft Environmental Assessment for the subject project.

In reviewing our records and the information received, Maui Electric Company (MECO) has no objection to the subject project at this time. We highly encourage the customer's electrical consultant to submit the electrical demand requirements and project time schedule as soon as possible so that service can be provided on a timely basis.

Should you have any questions or concerns, please call me at 871-2340.

Sincerely,

Ray Okazaki
Staff Engineer

7526-01
November 10, 2008

Mr. Ray Okazaki, Staff Engineer
Maui Electric Company Ltd.
210 West Kamehameha Ave.
Kahului, Hawaii 96733

Subject: Draft Environmental Assessment, Pre-Assessment Consultation;
Molokai Airport Aircraft Rescue and Firefighting Station Improvements
(AM 2031-14); Hoolehua- Palauu, Molokai, Hawaii,
TMK: 5-02-004:008; 082; 083
Response to Comment

Dear Mr. Okazaki:

Thank you for your September 16, 2008 response letter on the Draft Environmental Assessment (EA), Pre-Assessment Consultation for the Molokai Airport Aircraft Rescue and Firefighting Station Improvements (AM 2031-14) project. The Draft EA will note the Maui Electric Company, Ltd. (MECO) had no objection to the project.

The electrical engineer will contact your office as the design proceeds.

We appreciate your participation in the Draft EA process. If you have any questions, please call me at 808.946.2277 or fax to 808.946.2253.

Sincerely,

John L. Sakaguchi, AICP, Senior Planner

cc: V. Johnson, DOT-A
C. Nishio, API

APPENDIX B

Management Summary and Agency Review Letters for the Cultural Impact Assessment for the Molokaʻi Airport Aircraft Rescue and Firefighting Station Improvements (ARFF) Project, Pālāʻau Ahupuaʻa, Kona District, Molokaʻi Island TMK (2) 5-2-008:082 & 083

Prepared for
Wilson Okamoto Corporation

Prepared by
Lehua Kaʻuhane, B.A.,
Mishalla Spearing, B.A.,
Randy Groza, M.A.
and
Hallett H. Hammatt, Ph.D.

Cultural Surveys Hawaiʻi, Inc.
Kailua, Hawaiʻi
(Job Code: HOOLEHUA 1)

March 2009

A complete copy of this report has been filed with the Office of Environmental Quality Control, the State of Hawaii Department of Land and Natural Resources State Historic Preservation Division, and the State of Hawaii Department of Transportation Airports Division.

Oʻahu Office
P.O. Box 1114
Kailua, Hawaiʻi 96734
Ph.: (808) 262-9972
Fax: (808) 262-4950

www.culturalsurveys.com

Maui Office
1993 Main St.
Wailuku, Hawaiʻi 96793
Ph: (808) 242-9882
Fax: (808) 244-1994

Management Summary

Reference	Cultural Impact Assessment for the Moloka'i Airport Aircraft Rescue and Firefighting Station Improvements (ARFF) Project, Pālā'au Ahupua'a, Kona District, Moloka'i Island [TMK (2) 5-2-008: 082&083]
Date	March 2009
Project Number (s)	Cultural Surveys Hawai'i Inc. (CSH) Job Code: HOOLEHUA 1
Agencies	State of Hawai'i Department of Health / Office of Environmental Quality Control (DOH / OEQC)
Project Location	The project lies approximately 40 feet east of the Moloka'i Airport air traffic control tower and west of the existing passenger terminal. The project site is close to the intersection of the two existing runways.
Land Jurisdiction	State of Hawai'i
Project Description	State of Hawai'i Airport Division is proposing to construct an Air Craft Rescue Firefighting (ARFF) station to replace the existing facility
Project Acreage	Approximately 50,600 square feet (1.16 acres)
Area of Potential Effect (APE) and Survey Acreage	For the purposes of this cultural impact assessment (CIA), the APE is defined as the approximately206-acre project area. While this investigation focused on the project APE, the study area included the entire *ahupua'a* of Pālā'au.
Document Purpose	The project requires compliance with the State of Hawai'i environmental review process [Hawai'i Revised Statutes (HRS) Chapter 343], which requires consideration of a proposed project's effect on cultural practices. At the request of Wilson Okamoto Corporation, CSH is undertaking this cultural impact assessment (CIA). Through document research and cultural consultation efforts this document provides information pertinent to the assessment of the proposed project's impacts to cultural practices (per the OEQC's Guidelines for Assessing Cultural Impacts). The document is intended to support the project's environmental review and may also serve to support the project's historic preservation review under HRS Chapter 6E-42 and Hawai'i Administrative Rules Chapter (HAR) 13-284.
Consultation Effort	Hawaiian organizations, agencies and community members were contacted in order to identify potentially knowledgeable individuals with cultural expertise and/or knowledge of the project area and the vicinity. The organizations consulted included the State Historic Preservation Division (SHPD), the Office of Hawaiian Affairs (OHA), the Moloka'i Island Burial Council (MIBC), Hui Malama I Na Kūpuna 'O Hawai'i Nei, and the Department of Hawaiian Home Lands – Moloka'i.

Results of Background research	Background research yields: 1. The project area is located within central Moloka'i on the Ho'olehua plain situated within the *ahupua'a* (traditional land division) of Pālā'au. Pālā'au literally translates as wooden fence or enclosure. Pālā'au is the three land divisions in north central and southwest Moloka'i. It is also the name of the state park overlooking Kalaupapa peninsula and containing the phallic stone Ka-ule-o-Nānāhoa. Pālā'au also translates, "as to heal, as with herbs." 2. The project area was used for sugarcane, pineapple, pasture, wildlife habitat, and homesites. The natural vegetation consists of buffelgrass, *kiawe*, *'ilima*, *'uhaloa*, and feather fingergrass. 3. According to archaeological evidence, "Although West Moloka'i was probably not a heavily populated, permanent habitation area prehistorically, it nevertheless played an important role in the culture of aboriginal Hawaiians. The area was an important source of basalt for the manufacturing of adzes. The area was also a seasonal gathering place for the Hawaiians for catching fish and collecting shellfish along the coast" (AECOS, Inc. 1980: 7). For Pala'au, Kaluakio, and Punakou, Ho'olehua, and Naiwa, planting areas for yams and sweet potatoes cannot be delimited but it is known that these were grown in that general area and were, with fish, the staples of the inhabitants (Handy and Handy 1972:518) . 4. The area is rich in *mo'olelo* (legends, oral histories), *mele* (chants), and *'ōlelo no'eau* (proverbs, poetical sayings). One *mo'olelo* tells of two chiefs, Pālā'au and Ho'olehua, which are also the names of adjacent *ahupua'a*. Chief Ho'olehua had a wife, 'Īloli, the name of the *ahupua'a* on the southern coast of Moloka'i, west of Pālā'au. Hikauhi was the name of the daughter of Chief Ho'olehua and his wife 'Īloli. She became the wife of Pāka'a and mother of the famous Kū-a-Pāka'a. The ancient chant "Lei Mauna Loa", as associated with Lohi'au, king of Kaua'i, includes reference to Pālā'au. "The bird returns to rest at Pālā'au/He who owns the right to sleep is at Pālā'au" (Westervelt 1916:77). 5. *Wahi pana* (storied places) and cultural features of the landscape include, for example, the phallic stone (Kauleonānāhoa) which is perched just west of Pu'u Lua, on Nanahoa Hill. Kauleonānāhoa literally translates as "the penis of Nanahoa." It is said to be the finest example of phallic stones

	found throughout the islands. Above Ho'olehua was a little hill called Pu'u Pe'elua or, Caterpillar Hill. There is a legend associated with the stones on top of Caterpillar Hill in which a girl's lover is really a large *pe'elua* (caterpillar). A fire was lit around the large caterpillar and as the heat of the fire increased, the caterpillar burst into myriads of small caterpillars which were scattered over the plain. That accounts for the army-worm pest (*Cirphis unipuncta*), called *pe'elua* Handy and Handy (1972:146).
Results of Community Consultation	CSH attempted to contact 17 community members (government agency or community organization representatives, or individuals such as residents, cultural and lineal descendants, and cultural practitioners) for the purposes of this CIA. Twelve people responded and 4 *kūpuna* (elders) and/or *kama'āina* (native-born) were interviewed for more in-depth contributions to the CIA. While most of the community members and organizations participating in this study agree that the ARFF project will not directly impact cultural practices in the project area, community consultation yielded the following concerns regarding the broader cultural implications and potentially adverse effects on cultural, historic and natural resources, practices and beliefs as result of the proposed redevelopment of the ARFF: 1. The main concern expressed by two community members is that this project will support the infrastructure for an expansion of the Moloka'i Airport, although they understand that the proposed ARFF project is separate from the expansion. 2. Related to the above, 3 community members are concerned that an airport expansion, bringing more visitors to Moloka'i, will negatively impact life in Moloka'i. 3. Three community members felt no concern with the proposed development stating that the new building is necessary and on developed land. 4. The O'ahu OHA office has no comment on the assessment at this time and recommended consulting with Walter Ritte, Halona Ka 'opuiki, Glenn Teves and the Ho'olehua Homestead Association (Figure 1). 5. The Moloka'i OHA office expressed no concern with the proposed development as the area is within the existing, developed Moloka'i Airport. 6. The SHPD commented, "A review of the maps…attached and with general knowledge of the area seems to indicate that with

	the development of the Molokai Airport years ago and with subsequent improvements in that developed area, there does not seem to be a high risk for any impact on burials, cultural resources or any current traditional cultural practices there," and provided a legend and recommended also contacting: the Moloka'i office of OHA, the Moloka'i Department of Hawaiian Homelands and the Moloka'i public library for oral history or works of by the late Kumu Hula (hula teacher), John Kaimikaua (Figure 2). 7. Hui Mālama I Nā Kūpuna O Hawaii Nei representative, Edward Halealoha Ayau, stated that he is unaware of any cultural practices that would be affected by the project. However, he did mention that sand from Haleolono was brought in and used to build the airport terminal building (not the present project area). He has spoken with *kūpuna* who worked at the airport at the time, *iwi kūpuna* (ancestral bones/remains) were seen in that sand. 8. Two of the project participants mentioned that the project area may have once been used by King Kamehameha as a training ground for his warriors prior to the invasion of O'ahu.
Recommendations	Results from the background and community/cultural consultation research for this CIA indicate that although most of the study participants agree that the proposed developments for ARFF station will not negatively impact Hawaiian beliefs, resources and practices, there is some concern about the possible expansion of the Moloka'i Airport and resultant continued loss of a Hawaiian sense of place that will negatively impact Hawaiian ways of life. A good faith effort to address the following recommendations may help mitigate potentially adverse impacts on cultural, historic and natural resources and associated practices as result of the redevelopment of the ARFF station: 1. In light of the potential—however small—for discovery of inadvertent historic and/or cultural finds, especially *iwi kūpuna*, which may be discovered during ground disturbance and construction activities, as a precautionary measure it is advised that personnel involved in future development activities in the project area be informed of the possibility of inadvertent cultural finds, including human remains, and be made aware of the appropriate notification procedures to follow. 2. Generally, it is recommended that project proponents pursue proactive consultation with community members and cultural

	and lineal descendants with connections to Ho'olehua in order to address community concerns expressed in this CIA (e.g. regarding infrastructure, *iwi* and maintaining a Hawaiian sense of place in Moloka'i).

Responses from the Office of Hawaiian Affairs and the State Historic Preservation Division

PHONE (808) 594-1888 FAX (808) 594-1865

STATE OF HAWAI'I
OFFICE OF HAWAIIAN AFFAIRS
711 KAPI'OLANI BOULEVARD, SUITE 500
HONOLULU, HAWAI'I 96813

HRD09/3192C

February 17, 2009

Lehua Ka'uhane
Cultural Surveys Hawai'i
P.O. Box 1114
Kailua, Hawai'i 96734

RE: Cultural Impact Assessment consultation
Moloka'i Airport Improvements
Ho'olehua, Moloka'i
Tax Map Key: (2) 5-02-004:008;082;083

Aloha e Lehua Ka'uhane,

The Office of Hawaiian Affairs (OHA) is in receipt of your February 12, 2009 letter initiating consultation and seeking comments ahead of a cultural impact assessment (assessment) for proposed improvements to the Moloka'i Airport Aircraft Rescue and Fire (AARF) Station. Based on the information contained within your letter, the State of Hawai'i- Department of Transportation, Airports Division is proposing to replace the existing AARF facility because it does not meet Federal Aviation Administration guidelines for building design. The new facility will be situated within the existing boundaries of Ho'olehua Airport near the air traffic control tower and passenger terminal.

OHA has no comments on the assessment at this time. OHA recommends that consultation occur with the following individuals and/or organizations who may be willing to share their knowledge of the assessment area with you: Walter Ritte, Halona Ka'opuiki, Glenn Teves and the Ho'olehua Homestead Association. Please remember that this list is not all encompassing and we are sure additional individuals and organizations will be identified as you move forward with your consultation process.

Thank you for initiating consultation at this early stage and we look forward to the opportunity to review the draft assessment and provide additional comments. Should you have any questions, please contact Keola Lindsey, Lead Advocate-Culture at (808) 594-1904 or kcolal@oha.org.

'O wau iho nō me ka 'oia'i'o,

Clyde W. Nāmu'o
Administrator

C: OHA- Moloka'i CRC Office

Figure 1. February 17, 2009 response from OHA

LINDA LINGLE
GOVERNOR OF HAWAII

LAURA H. THIELEN
CHAIRPERSON
BOARD OF LAND AND NATURAL RESOURCES
COMMISSION ON WATER RESOURCE MANAGEMENT

RUSSELL Y. TSUJI
FIRST DEPUTY

KEN C. KAWAHARA
DEPUTY DIRECTOR - WATER

AQUATIC RESOURCES
BOATING AND OCEAN RECREATION
BUREAU OF CONVEYANCES
COMMISSION ON WATER RESOURCE MANAGEMENT
CONSERVATION AND COASTAL LANDS
CONSERVATION AND RESOURCES ENFORCEMENT
ENGINEERING
FORESTRY AND WILDLIFE
HISTORIC PRESERVATION
KAHOOLAWE ISLAND RESERVE COMMISSION
LAND
STATE PARKS

STATE OF HAWAII
DEPARTMENT OF LAND AND NATURAL RESOURCES

STATE HISTORIC PRESERVATION DIVISION
601 KAMOKILA BOULEVARD, ROOM 555
KAPOLEI, HAWAII 96707

February 23, 2009

LOG NO: 2009.0907
DOC NO: 0902PC006

TO: Ms. Lehua Ka'uhane, Cultural Impact Assessments
Cultural Surveys Hawaii Inc.
P.O. Box 1114, Kailua, Hawaii 96734

FROM: Phyllis Coochie Cayan, History and Culture Branch Chief

SUBJECT: HOOLEHUA 1: A Cultural Impact Assessment (CIA) for the Proposed Molokai Airport Aircraft Rescue and Fire Fighting Station Improvements.
TMK: (2) 5-02-004:008; 082;083.

Thank you for the opportunity to review the above cultural impact assessment for the proposed Molokai Airport Aircraft Rescue and Fire Fighting Station Improvements.

A review of the maps you attached and with having a general knowledge of the area seems to indicate that with the development of the Molokai Airport years ago and with subsequent improvements in that developed area, there does not seem to be a high risk for any impact on burials, cultural resources or any current traditional cultural practices there.

As you may know from your research, the old chants of Molokai speak of forested lands that today is no longer there. There are legends associated with the greater land area and the natural resources (i.e. legend of the pe'elua or caterpillars – as noted in the road named Puu Kapeelua Avenue).

Here are some referrals that may be helpful in locating old time families or their descendants who may have more oral history of the general area:

- The Office of Hawaiian Affairs, Molokai Office or Trustee Machado and her staff.
- The Department of Hawaiian Homelands, Molokai Office.
- The public librarians at the Molokai Public Library for oral history or works by the late Kumu Hula John Kaimikaua who did extensive preservation of the Molokai chants and hula.

Another suggestion for your research and outreach is to advertise in the local Molokai papers for folks who may be willing to share their recollections of traditional cultural practices in your specific focus.

Any questions, please contact me directly at 808-692-8015 or via Phyllis.L.Cayan@hawaii.gov

cc: Pua Aiu, Ph.D., SHPD Administrator
Nancy McMahon, Deputy SHPO
Hinano Rodrigues, SHPD Cultural Historian (Maui)

Figure 2. February 23, 2009 response from SHPD

References Cited

AECOS, Inc.

1980 Environmental Field Studies for the Moloka'i Airport Master Plan. Honolulu, Hawai'i

Handy, E.S. Craighill, and Elizabeth Green Handy

1972 *Native Planters in Old Hawaii: Their Life, Lore, and Environment*. Bishop Museum Press, Honolulu.

Westervelt, William Drake

1916 *Hawaiian Legends of Volcanoes*, Collected and Translated from the Hawaiian. Ellis Press, Boston and Constable & Co., London.